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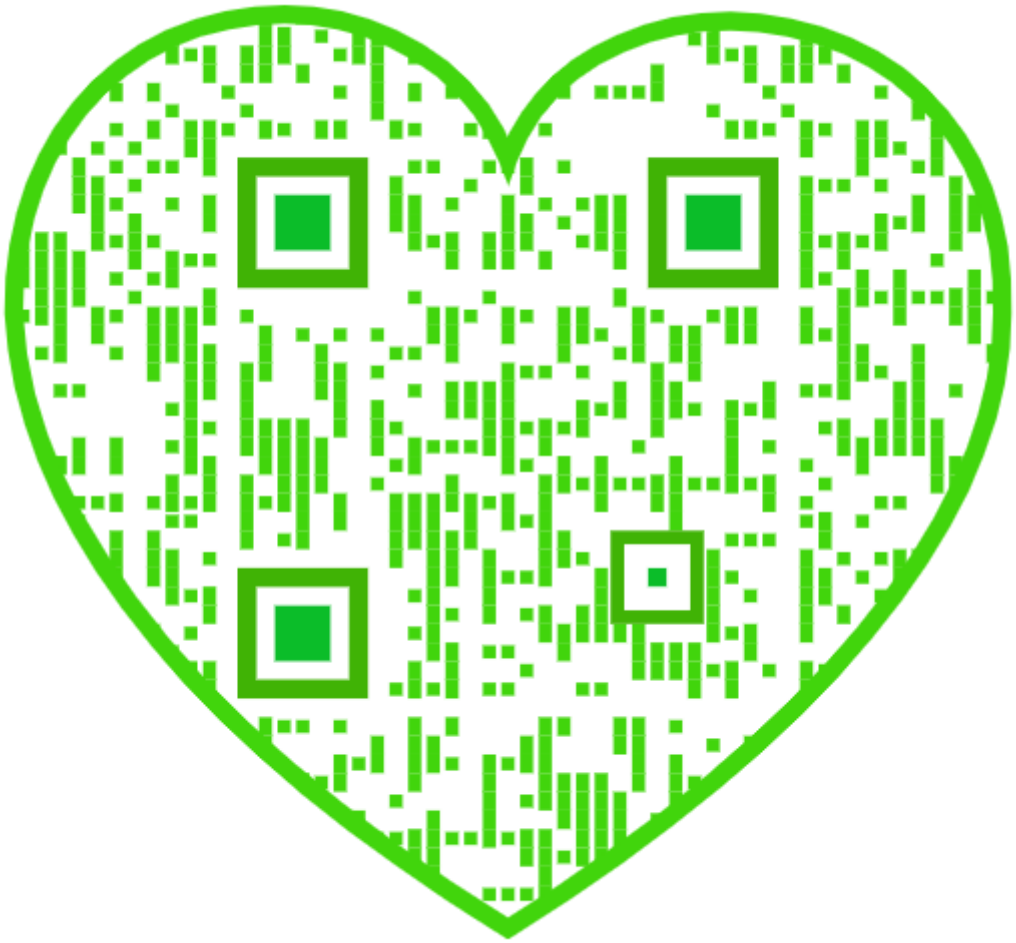

AN

ENCYCLOPAEDIA

OF

HINDU ARCHITECTURE

SVASTIKA MANSION (FRONT VIEW)

AN

ENCYCLOPAEDIA

OF

HINDU ARCHITECTURE

BY

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'What the learned world demand of us in India is to be quite certain of our data, to place the monumental record before them exactly as it now exists, and to interpret it faithfully and literally.'

MĀNASĀRA SERIES

VOLUME I—A Dictionary of Hindu Architecture (1927).

VOLUME II—Indian Architecture according to *Mānasāra Silpa-śāstra* (1927).

VOLUME III—*Mānasāra*—Sanskrit Text with Critical Notes (1934).

VOLUME IV—Architecture of *Mānasāra*—Translation in English (1934).

VOLUME V—Architecture of *Mānasāra*—Plates I–CXXXV (Architectural), CXXXVI–CLVII (Sculptural) (1934).

VOLUME VI—Hindu Architecture in India and Abroad (1946).

VOLUME VII—An Encyclopaedia of Hindu Architecture (1946).

FOREWORD

This is the seventh and the last volume of the *Mānasāra* series so far as the present writer is concerned. A few more volumes are, however, required to complete the work. Those new volumes will have to deal with the practical conclusions and workable plans and designs. This remaining work will involve an additional expenditure and an engineering study and draughtsmen's survey, estimate, calculations and comparisons with the few extant structures referred to in the writer's sixth volume, the *Hindu Architecture in India and Abroad.* In fulfilment of the fateful prediction of the late Professor E. J. Rapson of Cambridge University, the whole of the official career of the present writer commencing from the eventful year of 1914 has been fully occupied in preparing and seeing through press some 5,000 pages of these seven volumes. As the decree of fate would have it the war of 1914–18 caused from the very beginning of this task all possible interruption, risk and inconvenience while the work was carried out in London, Oxford, Cambridge, and Leyden. The difficult Indian conditions presented the familiar dilemma either to give up the self-imposed task altogether as is usually done by us after securing a degree and an appointment to a permanent post, or to carry it through, without much encouragement and assistance from any quarter, shouldering in addition to the peculiar duties of an occasionally unfortunate Professor of an Indian University the heavy burden of research. The unusual exigencies of the reconstructed Allahabad University demanded of the writer preparation and delivery of lectures to B. A., M. A., and Research classes up to 30 times per week and never less than 18, and also to do the departmental administration, and the routine work of various committees and examinations.

Contrary to the Sadler Committee's policy recommended for the new type of Indian Universities research activities even for the professors of the highest rank became practically of no importance, the teaching and social activities, as in schools and colleges, being much better appreciated by the authorities. Thus for instance our autonomous University considered it a useless waste of public funds to include a few pages in its annual report in order to give publicity to the mere titles of papers and books written and published by their teachers. Our non-interfering Government authorities also ceased to take any notice of their own servants who were sent on 'foreign service,' or rather banished to the universities.

The great educationist Governor, late Sir Harcourt Butler, sanctioned the cost of publication of these volumes to be advanced from the public funds before the delegation of the writer to the Allahabad University. But he left to Sir Claude de la Fosse, who was the first Vice-Chancellor of the reconstructed Allahabad University for a few months, to settle the terms of the publications including the author's royalty and reward. Sir Harcourt was sorry to learn of the changes which had taken place since his retirement from India and was 'shocked' when he was told in London in 1933 that an Indian successor of Sir Claude, as the Head of the Education Department of the Government, actually questioned in an official correspondence 'the public importance of printing Indian Architectural researches.'

The commitment of his predecessor had, however, to be carried out, and the Government, at the suggestion of again an Indian Adviser to the Governor, have since decided that after the realization of the full sum of money advanced by the Government for the cost of printing and publishing through the Oxford University Press, the further sale-proceeds, if there be any, will go to the successors of the writer. This is certainly a business arrangement. But the question of profits was not unfortunately considered when the first five volumes were published, for, the first two volumes published in 1927 actually gave a small profit to the Government of Rs.300 to Rs.400 despite the fact that only 250 copies were then published for circulation among scholars and that the prices of those volumes were fixed not as a business proposition, but merely to realize the cost of publication.

Naturally under such circumstances one would not feel encouraged to put in further labour and incur enormous expenditure, which are needed for the preparation of the remaining volumes and completion of the series. And there is not much hope either that the Governments and the various corporations, municipal boards, and other authorities who sanction the plan of a private building or erect a public structure will interest themselves in introducing an Indian policy in architecture until the new order following the present devastating war comes into being and until the new nations are able to rebuild and repair the rackless destruction. In the pre-war and peaceful times, however, facilities were freely provided by the State,

especially in the big European and American cities like London, Leyden, Paris, Berlin, Rome, Washington, New York, etc., to hold extramural evening classes and deliver popular lectures on architecture. Cities like Milan used to hold perpetual exhibition of model houses in order to educate the public in the construction of suitable dwellings. Perhaps a time will come even in countries like India, when it may be considered barbarous to question 'the public importance of architectural researches.' The common sense of civilized and progressive peoples has recognized that residential buildings are more important in some respects than even food and clothes. It is well known that among the amenities of life, houses afford in a large degree not only comfort and convenience but also health and longevity of life, safety, and security. Nomads are not considered civilized ; they are not attached to any locality ; they have no fixed hearth and home ; they are not inclined to spend their fortune in erecting dignified edifices, everlasting ancestral residences, memorials, monuments, temples, churches, mosques, mausoleums, towers of silence, monasteries and pagodas. The art and culture of a people are reflected and preserved in such monuments. They sustain and stimulate national pride. Thus the architectural structures differ in various countries to suit their economic and climatic conditions, weather and soil, taste and aspiration, and material, moral and spiritual progress. It is, therefore, necessary to settle the architectural policy of each country in its own way. For India no better authority containing the experience of generations and experiments of centuries will ever be available than what is revealed by the *Mānasāra* series.

Apart from supplying cultural and historical information these volumes contain a key which when understood may help the tackling of Indian housing problems. It has been shewn and recognized by discerning authorities that whatever elements have been introduced to India by the Persians, Moghals, Pathans, and the Europeans, have failed to suit the Indian climatic and soil conditions. Neither the desert houses of Arabia nor the rain-coats and the snow covers of European countries can ever suit the peculiar conditions of India. Experience of generations and experiments of centuries are contained in our *Vāstu-śāstras* (science of architecture). Like the Indian dietary of predominantly vegetarian dishes and Indian clothes of loose types,

Indian houses of our Śāstra (scientific) styles are naturally more suitable for us. A wide dissemination of an accurate knowledge of true Indian architecture as revealed for the first time in these volumes must be the first step of the housing reform in India.

The present volume is a revised and enlarged edition of the writer's *Dictionary of Hindu Architecture* which was published in 1927, without any plates. Its change of title to *An Encyclopaedia of Hindu Architecture* was originally suggested to the London University and missed by several learned scholars. A respected one[1] commented in his review of the *Dictionary* on this point very strongly : 'The *Dictionary* is a book which is so well done that it appears to be no exaggeration to say that for many decades it cannot be improved upon unless, of course, the South reveals to us more hidden treasures. If there is anything to object to, it is the title of the book, which does less than justice to it. "Encyclopaedia" would be a fitter title. The term "Dictionary" is associated in our minds with word-meanings, while Dr. Acharya's work is very much more than "word-meaning." Each term is followed by its meanings, mostly technical, an exhaustive account of the subject, and references to standard works of a wide range of literature. Thus, it will be seen, the work deserves a better title than "Dictionary." In fact Dr. Acharya himself suggested to the London University the compiling of "An Encyclopaedia of Hindu Architecture," and it appears to have been a mere freak of fortune that when the University decided to entrust the learned Doctor with the work of compiling, they chose the term "Dictionary." They appear to have been led to do this by the nature of the usual run of work done by modern scholars who in many cases have the unhappy knack of "shirking work"; but in being led away by the prejudice, the University were unfair to their *alumnus*, who has, by this work, more than justified the title that he had himself suggested. . . . It is a matter of special gratification to us of the Allahabad University that we have at the head of our Ṣanskrit Department a scholar capable of doing work which, as a monument of industry and patience, compares favourably with the best of that class of scholarly work which has hitherto been regarded as *German*.'[2]

[1] Mahāmahopādhyāya Dr. Sir Ganganatha Jha, *Indian Review*, March, 1928.

[2] For similar comments by several other Reviewers, please see the concluding appendix of this volume and also pp. IA to IIA of the writer's *Architecture of Mānasāra* (Volume IV of the *Mānasāra* Series).

The distinguished artist, Dr. Abanindra Nath Tagore, C.I.E., observes also that the *Dictionary* is 'in the nature of an Encyclopaedia embracing all the existing treatises on Indian art. He (the *author*) has herein presented before us all the information that so long lay hidden and scattered all over the world . . . it may be appropriately called the *Mahābhārata* of the literature on Indian art, for, in it we find all that there is to know about Indian art. . . . Hitherto it has been extremely difficult to be able to read all the connected literature that is to be found in libraries whether in India or outside. Everyone of us does not know the language in which the treatises are written. Moreover, most of the original texts are preserved in distant lands. In the circumstances, a volume of this nature, written in English and containing as perfect a compendium as is possible, of all the existing treatises on art, came to be a necessity, not only for us but for foreign artists as well. . . . I cannot adequately express the extent to which I shall be able to make use of it . . . and the profit which my pupils will derive from it.' [1]

'Students of Indian architecture should be grateful to him (*author*) for accomplishing with such thoroughness a task which has been long overdue, and which must have entailed a tremendous amount of patient and often disinteresting work, in a number of different languages. The *Dictionary of Hindu Architecture* contains all the architectural terms used in the *Mānasāra* and in the known *Vāstu-śāstras*, published inscriptions and other archaeological records with full references and explanations.' [2]

'Professor Acharya's *Dictionary of Hindu Architecture* is a monumental work, the first of its kind. It deals with three thousand words relating to architecture and sculpture and cognate arts. Under each term is brought together all the necessary information in the form of a short article illustrated with copious quotations from the ancient printed books, as well as manuscripts, the general literature and the archaeological records. And this has been done with a thoroughness and accuracy which are the author's own. Full quotations for bringing out each and every shade of the meaning of a word are

[1] Translated by Mr. B. N. Lahiri, M.A., I.P., from the *Pravāsi*, April, 1928.

[2] *The Times* Literary Supplement, May 31, 1928.

given. In effect the *Dictionary* becomes more of an Encyclopaedia rather than a dictionary.' [1]

In consideration of such comments and in view of the fact that illustrative plates containing measured drawings and photographs have been added, the Government and the Oxford University Press have agreed to the present title. But ' the freak of fortune ' truly designated by Sir Ganganatha has continued to the very end in other respects as referred to in the opening paragraphs and mentioned later on.

The prediction that ' for many decades it cannot be improved upon' has also proved literally true. ' No hidden treasures ' have been revealed in any quarter. All the new publications including all archaeological explorations and reports which came out between 1928 and 1943 have been closely searched. The very extensive volumes, reports, and explorations relating to Central Asia which have been largely due to Sir Aurel Stein, as well as the voluminous publications of the Dutch, the French and lately of the Indian scholars relating to the Far East and Insulindia have also been patiently gone through.[2] But not many new ' terms ' have been discovered. The new terms added in this volume will be hardly one or two per cent. of the original list. But a number of new ' articles ' under the old and the new terms have been added. Articles like the playhouse (under RAṄGA) and Svastika symbol, etc., contain all information which is at present available. Articles on fine arts (under KALĀ) and Indo-Persian Architecture, and Maya Architecture of Central America, etc., are also new.[3]

Thus although the matter has largely increased, Lt.-Col. D. W. Crighton decided to reduce the unwieldy bulk of the volume by the device of smaller types, larger pages, and closer printing, which, it is hoped, will not cause any inconvenience to the readers. Colonel Crighton and Mr. M. G. Shome, his successor, as the Superintendent of Government Press, have endeavoured to produce a faultless volume comparable with the best of European publications.

[1] The *Pioneer*, February 13, 1928.

[2] *See* further reference to these works under " Sources " in the Preface which follows this Foreword (pp. xvii–xviii) and also the Bibliography, pp. 679–84.

[3] Another additional and very expensive effort, which is not directly concerned with the present volume, has been made in erecting a residential house for a demonstration, the result of which is elaborated in the Preface of Volume VI (*Hindu Architecture in India and Abroad*).

The original plan and scope as well as the ideal and general method followed in the *Dictionary*[1] have been retained in this *Encyclopaedia* also.[2]

What remains to be added refers to further instances of the ' freak of fortune.' Under the war conditions of 1914-18 the work was commenced and under the present devastating war conditions it is completed. Among various other disappointments it is painful to recall that in April, 1939, Lt.-Col. D. W. Crighton took to England about 250 pages manuscripts of the present volume and after the declaration of the war in the fateful month of September, the Colonel wrote that he would send back the manuscripts together with his suggestions for printing. His suggestions were received and have been followed but the original manuscripts never came back. They had to be prepared again with all the annoyance and labour involved in such a process. Some of the new entries and additions and alterations made in the missing pages during the past twelve years may have been, however, lost altogether. Those who work along this line may share the writer's disappointment and will recognize the fact that it is hardly possible for a writer to re-write an article in the same spirit, with the same fulness and satisfaction as at the first inspiration.

Another unfortunate incident alluded to in the Preface refers to the eye-trouble which started as the result of a very close examination and decipherment for several years of a huge quantity of very badly preserved old manuscripts on ' Śilpa-sāstras written in five different scripts, and of some 50,000 lines of inscriptions.' Over and above this the eyes were severely exercised by the reading of three proofs of some 5,000 pages of these seven volumes, of which not only every word but also every letter and every line thereof had to be minutely scrutinized at least three times each. All this strain for the past thirty years aggravated the ailment to such an extent that the proofs of this last volume had to be read, despite medical advice, with one eye only, the other being unserviceable and requiring a risky and expensive operation which had to be postponed with a view to completing this work.

[1] *See* pp. x-xii.

[2] For details, *see* pp. xx-xxii.

I take this occasion to record my most respectful thanks to the Government of the United Provinces for generously advancing the cost of publication of all the seven volumes. My respectful acknowledgments are also due to the Government of India, especially to the Department of Archaeology whose Directors General and Provincial Superintendents very generously supplied all the necessary photographs of the extant monuments and reprints from the Government publications. I also take this opportunity to express my indebtedness to the Governments of Siam, Netherlands (Java and Sumatra), and French Indo-China for supply of photographic views of Indian monuments in Insulindia and for permission to reprint certain plates from their official publications. Mr. S. C. Mukerjee, B.A., C.D., A.R.C., A.I.I.A., and his draughtsmen have supplied all the measured drawings and the plates for the illustration of certain objects of which no extant examples are available. These drawings and plates had to be prepared from the description found in the texts and required great skill in representation. Thus they have earned my gratitude.

Lt.-Col. D. W. Crighton, and, after his retirement, his successor, as the Superintendent of the Government Printing and Stationery, Mr. M. G. Shome, and their staff have endeavoured to produce a faultless volume. Colonel Crighton's plan and arrangement of the matter has been strictly followed. In his great wisdom he cast the new types for the last two volumes of the series and stocked the required amount of paper excepting those for plates before the war of 1939 was declared. I shall always remain grateful to Colonel Crighton, Mr. Shome and their staff for all they have done to bring out these volumes and to mitigate my drudgery for more than a quarter of a century during which these volumes passed through the Press.

My thanks are due to Mr. M. S. Sharma, M.A., L.T., who assisted me substantially in preparing the Index of the modern architectural terms as translated in the body of the work together with their Sanskrit equivalents.

I am also thankful to Mr. M. G. Nayar, Senior Reader of the Government Press, for arranging the plates and the final revision of the last proof.

P. K. ACHARYA.

ALLAHABAD UNIVERSITY :
April, 1944-46.

PREFACE TO THE FIRST EDITION

Origin and scope of the work—This Dictionary (encyclopaedia) owes its name to the University of London.[1] A glossary of the architectural terms used in the *Mānasāra*, the standard work on Hindu architecture, was prepared for my private use when I found it indispensable, after struggling for two and a half years to edit for the first time and translate into English a text, which is written in five different scripts,[2] possesses eleven badly preserved manuscripts, has undergone five recensions, and comprises more than 10,000 lines of a language rightly remarked by Dr. Bühler as the ' most barbarous Sanskrit.'[3] In this connexion there arose an occasion for me to express to the University the opinion that an encyclopaedia of Hindu architecture was badly needed. Architectural expressions appear throughout the whole field of general Sanskrit literature and epigraphical records, as well as in the extensive special branch of literature known as *Vāstu-śāstras*, more familiarly called *Śilpa-śāstras*. Existing dictionaries, in Sanskrit, English or any other language, do not elucidate architectural expressions; and the texts of the *Vāstu-śāstras* have been waiting for hundreds of years to be unearthed from manuscripts which are quite inaccessible without the guidance of a special dictionary that would also be instrumental in bringing to light many new things hitherto left unexplained in inscriptions and general literature. The University selected me as the person most immediately concerned and entrusted me with the task, suggesting that I should ' make a full " dictionary " of all architectural terms used in the *Mānasāra*, with explanations in English, and illustrative quotations from cognate literature where available for the purpose.'

Thus the terms included in this encyclopaedia are primarily those found in the *Mānasāra*. But all the new architectural terms of

[1] It has developed out of a Thesis, which was accepted by the University for the D. Lit. degree. *See* the Foreword for the change of title to ' Encyclopaedia.'

[2] Grantha, Tamil, Telugu, Malayalam, and Nagari.

[3] *Ep. Ind.*, Vol. I, p. 377; compare also Sir R. G. Bhandarkar, *Ind. Ant.*, Vol. XII, pp. 140, 141.

any importance discovered in all the known architectural treatises, epigraphical documents, and general literature have also been added. I should estimate the new terms at about one-fourth of the total, numbering approximately three thousand.[1] No record has, however, been kept of the extent of the architectural manuscripts or the general literature searched, but some 50,000 pages of archaeological documents have been gone through almost line by line.

Extent of architectural terms comprehended—In the *Vāstu-śāstras* architecture is taken in its broadest sense and implies what is built or constructed in lasting materials and with a design and an ornamental finis. Thus, in the first place, it denotes all sorts of buildings, religious, residential and military, and their auxiliary members and component mouldings. Secondly, it implies town-planning; laying out gardens; constructing market places; making roads, bridges, gates; digging wells, tanks, trenches, drains, sewers, moats; building enclosure walls, embankments, dams, railings, *ghāts*, flights of steps for hills, ladders, etc. Thirdly, it denotes articles of house furniture, such as bedsteads, couches, tables, chairs, thrones, fans, wardrobes, clocks, baskets, conveyances, cages, nests, mills, etc.

Architecture also implies sculpture, and deals with the making of phalli, idols of deities, statues of sages, images of animals and birds. It includes the making of garments and ornaments, etc.

Architecture is also concerned with such preliminary matters as the selection of site, testing of soil, planning, designing, finding out cardinal points by means of a gnomon, dialling; and astronomical and astrological calculations.

These and similar matters are expressed by technical names which are to be understood as architectural terms for the purpose of this dictionary (encyclopaedia).

Principal sources and arrangement of materials—The sources drawn upon in this compilation may be classified under two divisions, namely, literary and archaeological. The former includes all the known *Vāstu-śāstras*, mostly in manuscript, which are avowedly architectural treatises, such as the *Mānasāra*, etc.; architectural

[1] *See* the Foreword for a reference to the further additional terms discovered since 1928 and incorporated in this volume.

portions of the *Āgamas*, and the *Purāṇas*, cognate portions of the Vedic and classical literature, such as the *Brāhmaṇas*, the *Sūtras*, the Epics, *Kāvyas*, dramas, etc. The archaeological records comprise all the inscriptions and other cognate matters published in the following series : *Epigraphia Indica* (first 13 volumes) ; *Indian Antiquary* (first 44 volumes) ; *Corpus Inscriptionum Indicarum* (2 volumes) ; *Epigraphia Carnatica* (12 volumes, in 15 parts) ; *South Indian Inscriptions* of Dr. E. Hultzsch, late Rai Bahadur V. Venkayya, and Rao Sahib H. Kṛishna Śāstri (3 volumes, in 8 parts) ; General Sir A. Cunningham's *Archaeological Survey Reports* (23 volumes) ; *Archaeological Survey*, New Imperial Series (Vols. IV, XI, XII, XVIII, XXI, XXIII, XXIV, XXXIII, XXXIV) ; and *Mysore Archaeological Survey Reports* (Vols. I, II, III), [Serindia, by Sir Aurel Stein ; Report on Archaeological Tour with Bunar Field Force (1900), by Stein ; Ancient Khotan (Vols. I, II), by Stein, Ville de Khotan, by Remusat ; L'Art de Gandhara, by M. Foucher ; Notes Chinoise, by M. S. Levi ; Fa-hien's Travels, by Legge ; Asiatic Researches (Vols. I—XIV) ; Marco Polo (Vols. I, II), by Yule ; Ancient Colonies in the Far East, by R. C. Mazumdar ; History of Siam, by Wood ; History of Burma, by Phare ; Inventaire Descriptif des Monuments Chams de L'Annam (Vols. I, II), by M. H. Parmentier ; Cambodge (Vols. I, II, III), by E. Aymonier ; Le Cambodge, by M. L. Delaparte ; Java and Her Neighbours, by A. S. Walcott ; De Sutrantraasche Period der Javansche Geschiedenis (1922), by Krom ; Bijdragen tot-de Taal-Land en Volken-Kunde van Nederlandsche Indie (1918); Buddhist Records, translated by Bill ; History of Art in Persia, by Perrot and Chipiez ; Etudes Iraniennes, by Darmesteter ; Scritores rerum Alexandri Magni, by C. Müller ; Architectural Remains : Anuradhapur (Ceylon), by Smitter; etc.[1]].

Illustrative quotations from these sources are, to speak very *generally*, arranged in the order in which they are mentioned above. Illustrations from other sources of smaller extent have been given where they seemed most suitable.

Appendices—A sketch of the important Sanskrit treatises on architecture is given in Appendix I. In Appendix II is given an

[1] *See* further details under Bibliography.

alphabetical list of the historical architects mentioned in the archaeological records, together with short notes on their works and dates, where available. This list does not include those names which are casually mentioned without a reference to their works in the general literature, *Purāṇas*, *Āgamas*, and in the *Śilpa-śāstras*.

Ideal and general method—Dr. F. W. Thomas was the first to suggest the idea of compiling such an encyclopaedia long before I felt the necessity of the glossary mentioned above. In carrying out Dr. Thomas's kind advice it seemed to me that the most natural method was the one suggested by Dr. Burgess (*Ind. Ant.*, Vol. XIV, pp. 319–20), for collecting materials for the ancient Geography of India by indexing separately all the geographical words occurring in the archaeological and literary documents. Dr. Fleet illustrated this principle by making a topographical list of such words found in the *Bṛihat-saṁhitā* (*Ind. Ant.*, Vol. XXII, p. 169). This was followed by a similar list of words from the *Bhāgavata-Purāṇa*, by Revd. J. E. Abbott (*Ind. Ant.*, Vol. XXVIII, p. 1, f.). There such list-making stopped. It would have been much easier for me if I could have made use of any such list of architectural terms from any of the documents consulted.[1]

Professor L. D. Barnett, M.A., LITT.D., suggested that I should take Dr. S. Sörensen's Index to the *names* in the *Mahābhārata* as my model. I have followed his method, as well as that of Professors Macdonell and Keith in the Vedic Index, so far as these indices are concerned in bringing together everything useful in the form of a short article.

Despite its bulk, Sörensen's Index mostly confines itself to the proper names contained in the *Mahābhārata*, and does not include any illustrative quotations. But I had to go much beyond a single work and consult an extensive field of literature, like the veteran workers of the Vedic Index of *names* and *subjects*, which, though it contains subjects in addition to proper names, has not, for obvious reasons, cited the original passages in text or translation in addition to giving references to them. In this respect I took the

[1] Dr. A. K. Coomaraswamy published a short list after the publication of my *Dictionary* referring to a few new terms from the Buddhist literature and the writer's *Indian Architecture* (1927).

largest Sanskrit work, the *St. Petersburg Dictionary*, as my ideal. But there, too, I had to differ from its immortal authors, Messrs. Böhtlingk and Roth, the fathers of the most useful Sanskrit researches, in two important points. First, the *St. Petersburg Dictionary* does not, for obvious reasons, give in all cases the full context of the passages quoted therein. For instance, from the illustrations like 'prāsādāruḍha' and 'prāsādāṅgana' (*see St. Pet. Dict.*, under PRĀSĀDA), it is difficult to see whether 'prāsāda' implies a temple, or a palace, or an ordinary residential building, or the assembly room and confessional hall of the Buddhist priesthood. In spite of some tremendous difficulties, I found it unavoidably necessary to cite long passages, in text or translation, or sometimes both, to illustrate the particular bearing of a term. 'Pīṭha,' for example, implies a seat, an altar, a platform, the pedestal of a column, the basement of a building, the plinth, the *yoni* part of the *liṅga*, etc.; these different shades of meanings cannot be made clear by such quotations as 'piṭhopari' or 'piṭham ashṭāṅgulam.' The second point, by far the more significant, will further explain the need of long contexts. The *St. Petersburg Dictionary* refers only to well-known treatises which, though covering an extensive field, are yet easily accessible, and does not deal with manuscripts locked up and preserved as relics; nor has it anything to do with the epigraphical documents. My literary quotations are in most cases from a large number of works and manuscripts some of which are written in unfamiliar scripts and most of which are neither well known nor easily accessible; and the illustrations from all the published inscriptions and other archaeological records, comprising approximately 50,000 pages, also necessitated the full context, partly for reasons stated above, and partly with a view to avoiding the possibility of distracting the attention of the reader and interfering with his grasping the argument rapidly.

Alphabetical order and transliteration—I could not avail myself of the express advice of Dr. Fleet in his highly appreciative Review of Dr. Sörenson's masterly Index (*Ind. Ant.*, Vol. XXXIV, p. 92) to arrange the words according to the European alphabetical order, which, in the opinion of the reviewer, has enhanced the value of the work. The European alphabet, being more imperfect than the Sanskrit alphabet with regard to the number of characters, especially

the vowels and the phonetical arrangement of them, seemed unsuitable for the terms which are included in this dictionary (encyclopedia.) In either of the alphabets, the transliterated Sanskrit words in some cases would be more or less confusing (e.g. Ṛishi, Ṛiksha, Rintika, Ripu). But for the difficulties of making typewritten copies[1] before the dictionary went to press, I should have preferred to have Sanskrit words written in Sanskrit characters. Following the order of the Sanskrit alphabet, words like 'vaṁśa,' and 'śaṅku' are given not before 'vakra' and 'śaka' (as in the *St. Pet. Dict.*, *M. W. Dictionary* and the Vedic Index), but after 'vahana' and 'śashpa.' The *anusvāra* is derived from at least four nasal characters of the Sanskrit alphabet (ṅ, ñ, n, m). Logically the *anusvāra* should follow the order of the original letters : 'śaṁku' should be where 'śaṅku' would be placed ; but this is an extremely confusing arrangement (*see Apte's Dictionary*). There is no reason why 'śaṁku' should be read before 'śaka,' there is also no reason for its being placed after 'śashpa,' although one should be quite justified in doing so when he is following the order of a particular alphabet, and does not hesitate to read in another alphabet *e* after *d*, *i* after *h*, *o* after *n*, and *u* after *t*, or *l* after *k*, *h* after *g*, and so forth.

In transliteration I have followed the system of the Archaeological Survey of India. But I have not made any distinction between *e* and *é*, *o* and *ó*, simply because there is no such distinction in the Sanskrit language. These deviations from the trodden paths, which seem to be untenable, will not, it may be hoped, cause any inconvenience to readers.

Acknowledgment—Except in important cases which deserve special notice, the names of the scholars who have edited a particular inscription or written an article have not been added after the quotations. This need not offend anybody. I am sincerely grateful to the scholars to whom I owe the quotations. It seems, however, of little interest to know the name or names of the authors or editors of a particular passage, quoted occasionally a dozen times with full references to the article where it occurs. 'Vedi,'

[1] Four copies of the Thesis referred to above had to be submitted to the University of London.

for example, implying a throne, has a parallel instance in a passage quoted from an inscription. The passage is borrowed from the editors and my indebtedness is shown by the usual quotation marks, and I have stated that this passage occurs in 'Inscription from Nepal, no. 15, inscription of Jayadeva, verse 25, *Ind. Ant.*, Vol. IX, pp. 179, 182.' It, however, in no way enlightens the reader to know the names of the editors, Pandit Bhagwanlal Indraji and Dr. G. Bühler, C.I.E.

Again, a portion of a verse of the *Śāṅkhāyana Śrauta-sūtra* is quoted in the *St. Petersburg Dictionary*, but the full context is given in our encyclopaedia, and it is stated thus: *Śāṅkhāyana Śrauta-sūtra*, XVI, 18, 13 (*St. Pet. Dict.*). Beyond this, it seems unnecessary to add the names of Messrs. Böhtlingk and Roth. Lastly, in cases of quotations from general literature, the extent of which cannot be indicated even by an approximate number of books, it was impossible in some instances to mention the author's name. Compare, for example, a *Glossary of Grecian Architecture*, an anonymous work; and *Śilpa-śāstra-sāra-saṁgrahaḥ Śivanārāyaṇātmajena prāchīna-granthebhyaḥ sāram uddhṛitya prakāśitaḥ—Śilpa-śāstra-sāra-saṁgraha*, compiled by collecting essential portions of the ancient treatises by a son of Śivanārāyaṇa'; again, *Viśvakarma-jñāna*, corrected (śaṁśodhita) by Kṛishṇa-śaṅkara-śāstrī; the author, if there were a real one beyond the mythical Viśvakarman (Creator of the Universe), is not stated anywhere in the treatise itself.

Need of showing the results achieved—Although it would be presumptuous for anybody to say that the subject of a dictionary like this has been exhausted in a pioneer work, I might be permitted, in justice to myself, to add that all the known and knowable materials which were likely to be of any use for this encyclopaedia, have been closely consulted and utilized. Whether the results will justify the great labour involved will have to be left to the actual experiment of those who are in need of such a work.[1] But the

[1] *See* the 'Extracts from Opinions and Reviews,' at the end of this volume, also of the *Architecture of Mānasāra*, Volume IV (1934), by the writer, and 'What Others Think' in the writer's *Hindu Architecture in India and Abroad*, Appendix III, pp. 422–49.

tremendous difficulties of a compilation like this will perhaps be not fully brought home to all readers, because 'no one but those who have taken part in similar labours, can at all realize the amount of tedious toil, I might almost say drudgery, involved in doing everything singlehanded, collecting the quotations and verifying references and meanings, making indices and lists of words, sorting and sifting an ever-increasing store of materials, revising old work, arranging and re-arranging new, correcting and re-correcting, writing and re-writing, and interlineating "copy," till reams upon reams of paper have been filled, putting the eyesight, patience, and temper to a severe trial.'

Aids and encouragement received—My sincere obligations are due, to the Secretary of State for India in Council for all facilities and help which I had the privilege of receiving as a Government of India State scholar and which were needed by a pioneer in this most exacting branch of oriental researches, specially during the Great European War of 1914–18. I take this opportunity to offer my respectful thanks in particular to late Sir Austen Chamberlain, late Sir T. W. Arnold, C.I.E., and late Mr. N. C. Sen, O.B.E. Words fail me to express adequately my gratitude to Professor Dr. F. W. Thomas, C.I.E., the then Librarian of India Office, London. As stated above, I owe to him the inception of the idea and courage to undertake this task. He placed at my disposal all the materials in the India Office and procured for me most of the available manuscripts from different libraries in India and Europe. He facilitated my work in Holland. He arranged, through the appreciation and kindness of Sir John H. Marshall, C.I.E., D.LITT., the then Director General of Archaeology in India, the creation of a prize post for me directly under the Governor in Madras for the publication of this work; this arrangement, unfortunately, fell through owing to absence on leave of Sir John Marshall and retirement of Lord Pentland at the time when I went to take up this appointment. It was again through Dr. Thomas's introduction that Sir Claude de la Fosse, C.I.E., M.A., D.LITT., the first Vice-Chancellor of the reconstructed Allahabad University, became personally interested in this work and readily induced the great educationist Governor, Sir Harcourt Butler, to recommend to the Government of the United Provinces to advance the cost of its publication.

I take this opportunity to express my respectful gratitude to Sir Harcourt Butler and his Government. And to Sir Claude I am further indebted for his scholarly sympathy, friendly advice, and constant encouragement. To those great lovers of oriental scholarship, Rai Rajeshwar Bali Sahib, O.B.E., the then Minister of Education; Kunwar Jagdish Prasad, C.I.E., O.B.E., I.C.S., the Education (then Chief) Secretary; and late Mr. A. H. Mackenzie, M.A., B.SC., the Director of Public Instruction, I am in a debt of gratitude for further encouragement, which has kept up the energy and spirit needed in bringing out this dictionary, after working on it for the past twelve years.

For suggesting many improvements I am indebted to the veteran orientalists, Dr. L. D. Barnett, of British Museum, London, and late Professor E. J. Rapson, of Cambridge University, who examined the whole manuscript before it went to press. I am thankful to Professor J. Ph. Vogel, PH.D., of Leiden University, for helping me with all necessary books during my stay there. To Mr. E. L. G. den Dooren de Jong and Miss Ch. L. Du Ry van Beest Holle of Zootomical Laboratory, Leiden, I owe many friendly services in connexion with this work, but for which it would have been impossible for me to get on in Holland. To another talented lady friend, late Miss E. J. Beck, who took the trouble of putting in the diacritical marks to a duplicate typewritten copy of this dictionary, I owe, like many other Indian students, more obligations than I can adequately express.

Last but not least I am pleased to record my grateful thanks to Major W. C. Abel, M.B.E., V.D., lately the Superintendent of Government Press, Allahabad, and to his able successor, Mr. D. W. Crighton, and to their staff for their ever sympathetic and kind treatment towards me and their zealous and careful handling which was necessary in printing an encyclopaedia like this.

P. K. ACHARYA.

SANSKRIT DEPARTMENT,
UNIVERSITY OF ALLAHABAD:
August, 1927.

The Order of the Roman Characters and the Method of Transliteration adopted

a, ā ; i, ī ; u, ū ; ṛi, ṛī ; e, ai ; o, au ;
k, kh ; g, gh ; ṅ ; ch, chh ; j, jh ; ñ ;
ṭ, ṭh ; ḍ, ḍh ; ṇ ; t, th ; d, dh ; n ;
p, ph ; b, bh ; m ; y, r, l, v ;
ś, sh, s ; h ; ṁ ; ḥ.

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AN ENCYCLOPAEDIA OF HINDU ARCHITECTURE

A

AKSHA—The base of a column, the eye, a die.

(1) The base of a column :

Athavākshaṁ (=adhishṭhānaṁ) navāṁśochchaṁ janma chaikena kārayet। (*Mānasāra*, XIV, 17, note.)

(2) The eye :

Asyāyāmaṁ tri-mātraṁ syād vistāraṁ chaika-mātrakam।
Akshāyāmārdha-mātraṁ syād vistāraṁ yuktito nyaset।

(*M.*, LX, 29–30)

(3) A die :

Akshaiḥ sphaṭika-saṁyuktaṁ tulā-bhājanam eva cha।

(*M.*, LXVIII, 28.)

(4) Referring to the window-like part of a *dolā* (swing, hammock, palanquin), and of a chariot :

Purataḥ pṛishṭhato madhye parva(darpa)ṇaṁ bhadra-saṁyutam।
Pārśvayor vā(dvā)raṇaṁ kuryāt tasyādho'kshaṁ susaṁyutam।

(*M.*, L, 165–166)

Tasyādhaḥ karṇanaṁ kuryād akshotsedhārdham eva cha।

(*M.*, XLI, 51, *see* further context under AKSHA-BHĀRA.)

See GAVĀKSHA—*Cf. Mitāksharā* (ed. Cal. 1829) 146, 1 (*Pet. Dict.*) :

Akshaḥ pāda-stambhayor upari-nivishṭa-tulādhāra-paṭṭaḥ।
Akshāgra-kīla।
Pushkarāksha (*see Pāṇini*, 5, 4, 76).
Dhārābhir aksha-mātrādhiḥ (*Arjunasamāgama*, ed. Bopp, 8, 4.)

AKSHA-BHĀRA—A lower part of a chariot.

Tasyādho (below the pāda or pillar) karṇaṁ kuryād akshotsedhārdham eva cha।
Tat-tad-deśe tu chhidraṁ syād aksha-bhāre rathāntakam।
Chhidre praveśayet kīlam yuktyā cha paṭṭayojitam।

(*M.*, XLII, 51–53.)

AKSHI-REKHĀ—The eye-lines.

Akshi-rekhāṁ samālikhya savye'kshi kṛishṇa-maṇḍalam ।

(*M.*, LXX, 69.)

AKSHI-SUTRA—The line of the eyes.

Mukhāyāmaṁ tridhā bhavet ।
Akshi-sūtrāvaśānaṁ cha tasyādhas tat-padāntakam ।
Hikkā-sūtrād adho bāhu-dīrghaṁ ṛikshāṅgulaṁ bhavet ।

(*M.*, LXV, 12–13.)

AGNI-DVĀRA—The door on the south-east.

Chatur-dikshu chatush-koṇe mahā-dvāraṁ prakalpayet ।
Pūrva-dvāram athaiśāne chāgni-dvāraṁ tu dakshiṇe ।
Pitur-dvāraṁ tu tat-pratyag vāyau dvāraṁ tathottaram ।

(*M.*, IX, 292, 294–295.)

AGRAHĀRA—A village inhabited by the Brāhmaṇas.

Viprair vidvadbhir ābhogyaṁ maṇgalaṁ cheti kīrtitāṁ ।
Agrahāras tad evam uktaṁ viprendrāḥ Kāmikāgame ॥

(*Kāmikāgama*, XX, 3.)

Agrahāraṁ vināṇyeshu sthāṇyādishu vāstushu ।
Prāg-ādishu chatur-dikshu vāyau īśe śivālayaḥ ॥ (*ibid.*, XXVI, 32.)

NĪLAKAṆṬHA, 16, 3—(*Pet. Dict.*) :

Agraṁ brāhmaṇa-bhojanaṁ tad-arthaṁ hriyante rāja-dhanāt pṛithak kṛiyante te agrahārāḥ kshetrādayaḥ ।
Chatur-bhuja (*ibid* ; comm. Mbh.) : Agrahāra=śāsana.

AGHANA—Not solid, a hollow moulding, column or pillar.

Ghanañ-chāpy aghanañchaiva vinyāsam atha vakshyate ।
(Vistārāyāma-śobhādi-pūrvavad-gopurāntakam) ।
Yaṁ mānaṁ bahir anyena chūlikā-māna-saṁmitam ।

(*M.*, XXXIII, 290–292, *see also* 293–309.)

Referring to windows (or rather window-post) :

Tad-vistāra-ghanaṁ sarvaṁ kuryād vai śilpi(a)vit-tamaḥ ।
Gopure kūṭa-koshṭ(h)ādi-grīve pādāntare tathā ।
Ghane vāpy aghane vāpi yathā vātāyanair-yutam । —(*ibid.*, 592–594.)

Cf. Vistāraṁ cha dvi-mātraṁ syād agram ekāṅgulaṁ bhavet ।
Ghanaṁ ekāṅgulaṁ chaiva । (*M.*, LX, 17–18.)

Referring to the image of a bull :

Ghanaṁ vāpy aghanaṁ vāpi kuryāttu śilpi(a)-vit-tamaḥ ।

(*M.*, LXII, 17.)

AGHANA-MĀNA (*see* GHANA)—Measurement by the interior of a structure.

Evaṁ tat(d) ghana-mānam uktam aghanaṁ vakshyate' dhunā ॥
Vistārāyāma-bhaktiḥ syād uktavat(d)yuktito nyaset ।
Dvi-tribhāga-viśāle tu āyataṁ tat prakalpayet ।
Bhakti-tri-bhāgam ekāṁśaṁ bhitti-vistāram eva cha ।
Śeshaṁ tad garbha gehaṁ tu madhya-bhāge tu veśanam ।

(*M.*, XXXIII, 331–335.)

AṄKA(GA)ṆA (*see* PRĀṄGAṆA)—Same as Aṅgaṇa, a court, a courtyard.

Yathā madhye'ṅkanaṁ kuryāt pañcha-bhāgena vistṛitam ।

(*M.*, XXXIV, 143.)

Kalpa-drumasya purato bahir aṅkanam syāt । (*M.*, XLVIII, 72.)
Athātaḥ saṁpravakshye'ham aṅgaṇasya tu lakshaṇam ।
Angaṇaṁ dhvaja-yoniḥ syān mukhāyāmābhisaṁyutam ॥
Pādukānāṁ bahir-bhāgam aṅgaṇaṁ tat vidur budhāḥ ।
Dhvajaḥ sarvatra saṁpanna iti śāstra-nidarśanam ॥

(*Vāstu-vidyā*, ed. Ganapati Śāstri, VI, 1–2.)

Madhye tu prāṅgaṇaṁ kāryaṁ viśālenaika-paṁktikam ।
Ardha-paṁkti-vivṛidhya tu triṁśat paṁkty antam ishyate ।
Āyāme chaika-paṁkty ādi tri-guṇāntaṁ viśālatā ।
Evaṁ brahmāṅgaṇaṁ kāryaṁ jala-pāta-yutaṁ navā ॥
Madhyamaṁ chāṅgaṇa-sthānaṁ maṇḍapena yutaṁ tu vā ॥
Prāg aṅgaṇaṁ pradhānaṁ syāt prāgavāgaṅgaṇaṁ jvaraḥ ।

(*Kāmikāgama*, XXXV, 40, 41, 66, 131.)

Ujatāṅgaṇa-bhūmishu । —(*Raghuvaṁśa*, ed. Cal. 1, 52, *Pet. Dict.*).
Vimānaṁ haṁsa-yuktam etat tishṭhati te'ṅgaṇe ।

(*Devimahātmya*, ed. Cal. 5, 50.)

Nṛipāṅgaṇa—(*Kāvya chandrikā*, 166, 15 *ibid.*).
Nṛipāṅgana—(dental n, *Bhartṛihari*, 2, 46, *ibid.*).
Mahārājāṅgaṇaṁ śūrāḥ praviśantu mahodayam ।

(*Rāmāyaṇa*, II, 3, 19, *ibid.*)

Matsya-tīrthada sannidhānadali Linganṇa bagitinda doḍḍa-asvāthada baḷige aṅgaṇa 12 māḍida sēvā—'Linganṇa with devotion erected (a manṭapa of) 12 aṅgaṇas near the big asvattha tree in proximity to the Matsyatīrtha, on the bank of the Arkapushkarini.' (*Ep. Carnat.*, Vol. IV, Edatore Taluq, no. 3, Roman text, p. 84, Transl., p. 52).

AṄGA-DŪSHAṆA—The defects of the limbs; the penalties for a defective construction.

Mānasāra, Chap. LXIX, 1–73 :

The chapter is named Aṅgadūshaṇa in the colophon. The term would literally mean the defects of the limbs. The chapter opens with the proposal that the penalties on the master, the king, and the kingdom following a defective construction will be described :

Ālayādyaṅga-sarveshu hināḍhikyaṁ bhaved yadi ।
Rāja-rāshṭrādi-kartṛṇāṁ dosha-prāptim(-r)ihochyate (1–2).

There should not be, as stated, any defect in the width, height, plinth, lintel, pillar, entablature, finial, dome, door, adytum, staircase, terrace, gate-house, pavilion, wall, etc. (3–10).

Cf. Tasmāt tu dosha-saṁprāpti(ḥ) śilpidṛishṭi(r) nivārayet (11).

The illustrations, too, of penalties for defective construction are taken from the different architectural objects, such as door, staircase, pillar, wall, dome, spire, etc. Thus it is stated that if the altar (vedikā) be defective, the master would lose his eyesight (26) ; if the dome be larger or shorter, the people would suffer from poverty (29) ; if the pillars be larger or shorter, the race of the master would be exterminated (23), and so forth.

AṄGULA—A finger, a finger-breadth, a measure of about three-fourths of an inch ; one of some equal parts, into which an architectural or sculptural object is divided for proportional measurement.

(1) *Mānasāra*, Chap. II :

The definition of paramāṇu or atom :

Munīnāṁ nayanodvikshya(s) tat paramāṇur udāhṛitam (40).

Cf. Bṛihat-Saṁhitā (below).

(Paramāṇu or atom is the lowest measurement.)

The details of the aṅgula-measure (41–46) :

8 Paramāṇu (atoms)	=	1 Ratha-dhūli (car-dust),
8 Car-dusts	=	1 Vālāgra (hair's end),
8 Hair's ends	=	1 Likshā (nit),
8 Nits	=	1 Yūkā (louse),
8 Lice	=	1 Yava (barley corn),
8 Barley corns	=	1 Aṅgula (finger).

Three kinds of aṅgulas are distinguished, the largest of which is equal to 8 yavas, the intermediate one 7 yavas, and the smallest one 6 yavas (47–48).

Further details (49–53) :

12 Aṅgulas	=	1 Vitasti (span).
2 Spans or 24 aṅgulas	=	1 Kishku-hasta (smallest cubit).
25 Aṅgulas	=	1 Prājāpatya-hasta.
26 „	=	1 Dhanur-muṣṭi-hasta.
27 „	=	1 Dhanur-graha-hasta.
4 Cubits	=	1 Dhanuḥ or daṇḍa (bow or rod).
8 Daṇḍas (rods)	=	1 Rajju (rope).

Direction is given with regard to the use of the cubits of different lengths and other measures (54–58) : conveyances and bedsteads, etc. are stated to be measured in the cubit of 24 aṅgulas, buildings in general (vimāna) in the cubit of 25 aṅgulas, the ground or land (vāstu) in the cubit of 26 aṅgulas, and the villages, etc. in the cubit of 27 aṅgulas. The cubit of 24 aṅgulas can, however, be employed, as stated in measuring all these objects.

Chap. LV :

Three kinds of the aṅgula-measure :

Mātrāṅgula-gataṁ proktam aṅgulaṁ tri-vidham bhavet । (53).

The mānaṅgula is the standard measure ; it is equal to 8 barley corns :

Yava-tārāshṭa-mātraṁ syān mānāṅgulam iti smṛitam । (56).

The mātrāṅgula is the measure taken in the middle finger of the master :

Kartur dakshiṇa-hastasya madhyamāṅgula-madhyame ।
Parva-dīrghaṁ tan-nāhaṁ mātrāṅgulam udāhṛitam । (57–58).

The details of the deha-labdhāṅgula are left out ; but this measure is frequently referred to :

Trayas-triṁśach chhatāntaṁ syād deha-labdhāṅgulena vā । (64).

The deha-labdhāṅgula is to be understood as the measure, which is equal to one of the equal parts, into which the whole height of a statue is divided for sculptural measurement. This alone should otherwise be called aṁśa (part) ; but the term (aṁśa) is indiscriminately used for all the three aṅgula-measures, as well as for the term mātra. Compare, for example, Chap. LXV :

Mūrdh(n)ādi-pāda-paryantaṁ tuṅga-mānaṁ praśasyate । (2).
Chatur-viṁśach-chhataṁ kṛitvā tathaivāṁśena mānayet । (3).
Ushṇishāt keśa-paryantaṁ chatur-mātraṁ praśasyate । (4).
Ardhāṁśaṁ gala-mānaṁ syād vedāṁśaṁ gala-tuṅgakam । (6).
Sa yava-tryaṁśakaṁ chaivānāmikāyāmam ishyate । (26).
Meḍhrāntam ūru-dīrghaṁ syāt sapta-viṁśāṅgulaṁ bhavet । (9).

The deha-labdhāṅgula is also called the bera- (idol) aṅgula and the liṅga- (phallus) aṅgula, Chap. LXIV, 49–53 :

Aṁśakaṁ mānam evoktam aṅgulair mānam uchyate ।
Yal-liṅga-tuṅgaṁ saṁgrāhya chatur-viṁśach-chhatāntakam ।
Liṅgāṅgulam iti proktaṁ beraṁ tālavaśād api ।
Kṛitvā berāṅgulaṁ proktaṁ mānāṅgulam ihochyate ।
Yava-tārāshṭa-mātraṁ syād devānām aṅgulaṁ bhavet ।

The deva- (god's) aṅgula mentioned in the last line (53) is apparently the māna- (standard) aṅgula.

(2) *Bṛihat-Saṁhitā*, LVIII, 1–2 :

Jālāntarage bhānau yad-aṇutaraṁ darśanaṁ rajo yāti।
Tad vindyāt paramāṇum prathamaṁ tad-dhi pramāṇānām॥
Paramāṇu-rajo-vālāgra-likshā-yūkā yavo'ṅgulaṁ cheti।
Ashṭa-guṇāni yathottaram aṅgulam ekaṁ bhavati mātrā॥

Commentary quotes a parallel passage, the former stanza of which recurs in *Manu*, VIII, 132 (*cf.* below), whereas the latter wholly differs :

Tathā cha jālāntara-gate bhānau yat sūkshmaṁ dṛiśyate rajaḥ।
Prathamaṁ tat pramāṇānāṁ trasa-reṇuṁ prachakshate॥
Tasmād rajaḥ kachāgraṁ cha likshā yukā yavo'ṅgulam।
Kramād ashṭa-guṇaṁ jñeyaṁ jina-saṁkhyāṅgulaiḥ samāḥ॥

From an unknown author are the verses quoted by

(3) Bāpū-Deva in his edition of the *Siddhānta-śiromaṇi*, p. 52 :

Veśmāntaḥ patiteshu bhāskara-kareshvālokyate yad-rajaḥ।
Sa proktaḥ paramāṇur ashṭa guṇitais tair eva reṇur bhavet॥
Tair vālāgram athāshṭabhiḥ kacha-mukhair likshā cha yūkāshṭabhiḥ।
Syāt tribhiścha tadashṭakena cha yavo'shṭābhiś cha tair aṅgulam।

'Digit (aṅgula) has here (*B.S.*, LVIII, 4) no absolute, but a relative value ; it is the module and equal to $\frac{1}{108}$ of the whole height of the idol, or $\frac{1}{180}$ of idol and seat together.'

Commentary : yasmāt kāshṭhāt pāshāṇādikād vā pratimā kriyate tad dairghyaṁ piṭha-pramāṇa-vivarjitaṁ dvādaśa-bhāgavibhaktaṁ kṛitvā tatraiko bhāgo navadhā kāryaḥ, so'ṅgula-sajñako bhavati, yasmād ashṭādhikam aṅgula-śatam pratimā pramāṇaṁ vakshyati—(Kern, *J.R.A.S.* N. S., Vol. VI, p. 323, notes 1, 2).

(4) Introduction (pp. 8–9) to *Rājavallabha Maṇḍaṇa*, ed. Nārāyaṇa Bhārati and Yaśovanta Bhārati :

1	Aṅgula	= mātrā.	11	Aṅgulas	= go-karṇa.
2	Aṅgulas	= kalā.	12	,,	= vitasti (span).
3	,,	= parvan.	14	,,	= anāha-pada.
4	,,	= mushṭi.	21	,,	= ratni.
5	,,	= tala.	24	,,	= aratni.
6	,,	= kara-pāda.	42	,,	= kishku.
7	,,	= dṛishṭi.	84	,,	= purusha (height of a man).
8	,,	= tūṇi.			
9	,,	= prādeśa.	96	,,	= dhanus.
10	,,	= saya-tāla.	106	,,	= daṇḍa.

This is apparently taken from the *Brahmāṇḍa-Purāṇa* (*see* below).

(5) *Brahmāṇḍa-Purāṇa*, Chap. VII (Vāyu-prokte pūrva-bhāge dvitīye anushaṅga-pāde) gives a curious origin of the aṅgula measure :

It is stated (in vv. 91–95) that people at first used to live in caves, mountains, rivers, etc. They began to build houses in order to protect themselves from cold and heat (śītoshṇa-vāraṇāt). Then they built kheṭas (towns), puras (houses), grāmas (villages) and nagaras (cities). And to measure their length, breadth, and the intermediate distance between two settlements (sanniveśa) the people instinctively (yathā-jñānam) employed their own fingers. Thence forward the aṅgulas are used as standards of measurement.

Then follow the details of the aṅgula measurement (vv. 96–101) :

Jayāṅgula-pradeśāṁs trīn hastaḥ kishkuṁ dhanūṁshi cha ।
Daśatvaṅgula-parvāṇi prādeśa iti saṁjñitaḥ ॥ (96).
Aṅgushṭhasya pradeśinyā vyāsa(ḥ) prādeśa uchyate ।
Tālaḥ smṛito madhyamayā gokarṇaś chāpyanāmayā ॥ (97).
Kaṇishṭhayā vitastis tu dvādaśāṅgula uchyate ।
Ratnir aṅgula-parvāṇi saṁkhyayā tvekaviṁśatiḥ ॥ (98).
Chatvāri-viṁśatiś chaiva hastaḥ syād aṅgulāni tu ।
Kishkuḥ smṛito dviratnis tu dvi-chatvāriṁśad aṅgulaḥ ॥ (99).
Chatur hasto dhanur daṇḍo nālikā yugam eva cha ।
Dhanuḥ sahasre dve tatra gavyūtis taiḥ kṛitā tadā ॥ (100).
Ashṭau dhanuḥ sahasrāṇi yojanaṁ tair vibhāvitam ।
Etena jojaneneha sanniveśās tataḥ kṛitāḥ ॥ (101).

(6) *Matsya-Purāṇa*, Chap. CCLVIII, vv. 17–19 :

Jālāṇṭara-pravishṭānāṁ bhānūnāṁ yad rajaḥ sphuṭam ।
Trasa-reṇuḥ sa vijñeyo vālāgraṁ tair athāshṭabhiḥ ॥ (17).
Tad-ashṭakena tu likhyātu yūkā likhyāshṭakair matā ।
Javo yūkāshṭakaṁ tad-vad ashṭabhis tais tad aṅgulam ॥ (18).
Svakīyāṅguli-mānena mukhaṁ syād dvādaśāṅgulam ।
Mukha-mānena kartavyā sarvāvayava-kalpanā ॥ (19).

(7) *Vāstu-vidyā*, ed. Ganapati Śāstri, 1, 3–5 f :

Tatrādau saṁpravakshyāmi sarveshāṁ māna-sādhanam ।
Mānenaivākhilaṁ loke vastu saṁsādhyate yataḥ ॥
Paramāṇuḥ kramād vṛiddho mānāṅgula iti smṛitaḥ ।
Paramāṇur iti prokto yogināṁ dṛishṭi-gocharaḥ ॥
Paramāṇur ashṭābhis trasa-reṇur iti smṛitaḥ ।
Trasa-reṇuś cha romāgraṁ likshā-yūkā-yavās tathā ॥

and so forth (*see Mānasāra*).

(8) *Bimbamāna*, MS. (British Museum 558, 5292), v. 9 :

Yad-bimba-pramāṇena mānāṅgula(ṁ) vibhājite।
Tena bimbasya mānaṁ tu tatra(m) āyāmam ishyate।

(9) *Suprabhedāgama*, *Paṭala*, xxx, vv. 1–9 :

Athātaḥ saṁpravakshyāmi aṅgulānāṁ tu lakshaṇam।
Mānāṅgulaṁ tu prathamaṁ syāt mātrāṅgulam dvitīyakam ॥ (1)
Deha-labdha-pramāṇaṁ tu tritīyam angulaṁ smṛitam।
Yasmāt param aṇur nāsti paramāṇus tad uchyate ॥ (2)
Paramāṇur adhaś chaivāpi cha keśāgra eva cha।
R(l)ikshā-yūkā-yavās tatra kramaśo'shṭa-guṇair matam ॥ (3).
Mānāṅgulam iti proktaṁ tato mātrāṅgulaṁ śṛiṇu।
Āchārya-dakshiṇe haste madhyamāṅguli-madhyame ॥ (4).
Parva(ṁ) mātrāṅgulaṁ jñeyaṁ deha-labdhāṅgulaṁ śṛiṇu।
Pratimāyās tathotsedhe tāla-gaṇyena bhājite ॥ (5).
Teshvekaṁ bhāga-van-mānāṁ deha-labdhāngulaṁ smṛitam।

The objects measured in the three kinds of angulas :

Prāsāda-maṇḍāpāṁś chaiva prākārān gopurān api ॥ (6).
Grāmādya-kshetra-gaṇyeshu mānāṅgula-vidhānataḥ।
Āchārya-dakshāṅgulibhir mite vyāsa-mitādhikaiḥ (sic) ॥ (7).
Kūrche pavitrake chaiva sruve srugbhir athānyakaiḥ।
Yāge prayojitānṭha mātrāṅguli-vidhiś charet ॥ (8).
Atha mānāṅgulair vāpi kārayed yāga-karmaṇi।
Deha-labdhāṅgulenaiva pratimāṁ kārayed budhaḥ ॥ (9).

Then follow the technical names of the aṅgulas (vv. 10–16) :

One	aṅgula	is	called	bindu, moksha.
Two	aṅgulas	are	,,	kalā (elsewhere it is the name of one aṅgula), kolaka, padma, akshi, aśvini.
Three	,,	,,	,,	rudrākshi, agni, guṇa, śūla (and) vidyā.
Four	,,	,,	,,	yuga (and) bhāga, veda, and turīya.
Five	,,	,,	,,	rudrānana, indriya, bhūta, and vāṇa.
Six	,,	,,	,,	karman, aṅga, ayana, and rasa.
Seven	,,	,,	,,	pātāla, muni, dhātu, and abdhi.
Eight	,,	,,	,,	basu, lokeśa, and mūrti.
Nine	,,	,,	,,	dvāra, sūtra, graha, and śakti.
Ten	,,	,,	,,	diś, nāḍi, āyudha, and prādurbhāva.
Twenty	,,	,,	,,	trishu (and) vishku.
Thirty	,,	,,	,,	gati.
Forty	,,	,,	,,	trijagat (?).
Fifty	,,	,,	,,	śakvari.
Sixty	,,	,,	,,	atiśakvari.

Seventy aṅgulas are called yashṭi.
Eighty „ „ „ atyashṭi.
Ninety „ „ „ dhṛiti.
Hundred „ „ „ atidhṛiti.

The cardinal numbers are described (vv. 17–20) :

Ekaṁ daśaṁ śataṁ chaiva sahasram ayutaṁ punaḥ ॥ (17).
Niyutaṁ prayutaṁ chaiva koṭiṁ chaiva yathārbudam ।
Bṛindaṁ kharvaṁ nikhvaraṁ cha śaṅkhaṁ padmam ataḥ param ॥ (18).
Samudra-madhyāntarākhyaṁ aparaṁ tathā ।
Parārdham evākhyātaṁ daśa-vṛitt(-ddh)yuttarottaram ॥ (19).
Evam etāni choktāni saṁkhyā-sthānaṁ viṁśatiḥ ।

Three kinds of the vitasi (span), which is equal to 12 aṅgulas, are distinguished by their technical names :

Tālaṁ yamaṁ tri-bhāgaṁ cha shaṭ-kalāś cha vitastakam ॥ (20).
Shaṭ-kolakaṁ mukhaṁ chaiva dvādaśāṅgula-saṁjñakam ।
Aṅgushṭha-tarjani-yuktaṁ prādeśam iti kīrtitam ॥ (21).
(Madhyamāṅgushṭha-saṁyuktaṁ tāla-mānam iti smṛitam ।)
Aṅgushṭhānāmikā-yuktaṁ vitastir iti chochyate ॥ (22).
Kanishṭhāṅgushṭhayor yuktaṁ go-karṇam iti saṁjñikam ।

The correct reading of the last two lines should be :

Aṅgushṭhānāmikā-yuktaṁ go-karṇam iti saṁjñikam ॥ (22).
Kaṇishṭhāṅgushṭhayor yuktaṁ(-tā) vitastir iti chochyate ।

Cf. Brahmāṇḍa-Purāṇa, I, VII, 97, 98.
(*See* under GOKARṆA and VITASTI.)

Prādeśaś cha vitastiś cha gokarṇaś cha ime trayaḥ ॥ (23).

The two kinds of the measure by the fist :

Jajñādike prayoktavyāḥ prāsādādau na māpayet ।
Ratniḥ saṁvṛita-mushṭiḥ syād aratniḥ prasṛitāṅguliḥ ॥ (24).

Different kinds of the hasta or cubit measures :

Kishkus cha prājāpatayaś cha dhanur-mushṭi-dhanu(r)grahau ।
Aṅgulas tu chatur-viṁśat kishkur ityuchyate budhaiḥ ॥ (25).
Pañcha-viṁśatibhiś chaiva prājāpatyam udāhṛitam ।
Shaḍ-viṁśati-dhanur-mushtiḥ sapta-viṁśad-dhanu(r)grahaḥ ॥ (26).

The objects measured in these cubits :

Kishku-hastādi-chatvāri-mānāṅgula-vaśāt-tamaḥ (?) ।
Ebhir hasta-pramāṇais tu prāsādādīni kārayet ॥ (27).
Śayanaṁ chāsanaṁ chaiva kishku-māna-vaśāt kuru ।
Liṅgaṁ cha piṇḍikāṁ chaiva prāsādaṁ gopuraṁ tathā ॥ (28).
Prākāra-maṇḍapaṁ chaiva prājāpatya-kareṇa tu ।

The higher measures :

Dhanu(r)grahaś chatushkaṁ yad daṇḍa-mānaṁ prakīrtitam ॥ (29).
Sahasra-daṇḍa-mānena krośa-mātraṁ vidhīyate ।
Gavyūtir dvi-guṇaṁ jñeyaṁ tad-dhi(dvi)-guṇaṁ cha ghātakam ॥ (30).
Ghātakasya chatushkaṁ tu yojanā parikīrtitā ॥ (31).

(10) *Manu-Saṁhitā*, VIII, 271 (*cf.* under *Bṛihat-Saṁhitā* above) :

Nikshepyo'yomayaḥ śaṅkur jvalannasye daśāṅgulaḥ ।

(11) *Rāmāyaṇa*, VI, 20, 22 :

Na hyaviddhaṁt ayor gātre babhūvāṅgulam antaram ।

(12) Aratni, cubit. According to the *Śulvasūtra* of Baudhāyana (Fleet, *J.R.A.S.*, 1912, 231, 2), this measure is equal to 24 aṅgulas or finger-breadths. The *Śatapatha-Brāhmaṇa* (X, 2, 1, 3) also mentions 24 aṅgulas or finger-breadths as a measure, but without reference to the aratni (*see* below), *cf.* Eggeling, *Sacred Books of the East*, 43, 300, n. 3.

(13) ' Prādeśa frequently occurs in the *Brāhmaṇas* (Vedic Index II, 152), (*Aitareya*, VIII, 5 : *Śatapatha*, III, 5, 4, 5, *Chhāndogya Upanishad*, V. 18, 1, etc.,) as a measure of length, a span ' (*ibid.*, II, 50).

(14) The *Śatapatha-Brāhmaṇa*, 10, 2, 1, 2 : Tasy-aish-āvamā mātrā yad aṅgulayaḥ, this is his lowest measure, namely the fingers.

(15) ' In some table the aratni is distinguished from the hasta, and is defined as measuring 21 aṅgulas. But the *Śulvasūtra* of Baudhāyana defines it as equal to 2 prādeśa, each of 12 aṅgulas, and so agrees in making it equal to 24 aṅgulas. In any case, our present point is that the *Kauṭilīya-Artha-śāstra* gives its value as 24 aṅgulas.' (Fleet, *J.R.A.S.*, 1912, p. 231, notes 1, 2.)

Compare also *ibid.*, pp. 231, 232, 233.

(16) ' Like some of the other Hindu tables, it (*Kauṭilīya-Artha-śāstra*) starts (p. 106, line 3) with the paramāṇu or ' most minute atom.' It takes its measures up to the aṅgula, through four intermediate grades, by eights ; it defines the aṅgula (line 7) as being equal to 8 yava-madhya, or 8 barley-corns laid side by side ; and it further defines it as the middle breadth of the middle finger of a middle-sized man. It tells us (line 11) that 12 aṅgulas are 1 vitasti or span, and (line 13) that 2 vitastis are 1 aratni ; here, by its aratni of 24 aṅgulas it means the measure which in other tables is usually

called hasta or kara, the forearm, the cubit ; and, in fact, it adds prājāpatya hasta as another name of the its aratni.

'In the regular course of the table it tells us next (line 20) that 4 aratnis (i.e. 4 hasta or cubits) are 1 danda, staff or dhanus, bow (from which it follows that 1 dhanus = 96 aṅgulas).'

'Now the aṅgula or finger-breadth may be the theoretical unit it may well have been originally the actual unit and the source of the other measures. But we can hardly doubt that the hasta or cubit eventually took its place as the practical unit ; and that a correct scale was maintained by keeping in public offices a standard hasta marked off into 2 vitasti and 24 aṅgulas. At any rate, the hasta is the practical measures to which we must attend in estimating all the others.'

(17) 'Following Colebrooke (*Essays*, I, 540, note), I take the hasta for easy computation at exactly 18 inches, which gives $\frac{3}{4}$ inch as the value of the aṅgula.'

AṄGHRI—A foot, generally a small (dwarf) pillar constructed on a large one, or in the upper parts of a storey, and pilaster ; a turret.

Tad-dvayaṁ chāṅghri-tuṅgaṁ syād ekāṁśaṁ prastarānvitam ।
(*M.*, XII, 35.)

Chatush-pādam tri-pādaṁ cha dvī-pādaikāṅghrim eva vā ।
(*M.*, LXVII, 8.)

Tatra hīnādhikaṁ chet pāda-sthānāṅghrikāśrayam ।
Sarveshāṁ bhitti-māneshu tatra dosho na vidyate । —(*M.*, LXIX, 60–61.)

As a synonym of the pillar :

Jaṅghā cha charaṇaṁ chaiva sthalī stambhamaṅghrikam ।
(*M.*, XV, 4.)

As a pillar of the first floor :

Tadūrdhve'ṅghri śarāṁśaṁ syāt । —(*M.*, XX, 16.)
Adri-sopāna-pārśve tu na kuryāt pārśvayor aṅghrikam ।
(*M.*, XXX, 163.)

As a dwarf pillar placed upon a larger column :

Athavā sapta-saptāṁśaṁ vibhajet tritalodaye ।
Chatur-bhāgam adhishṭhānaṁ tad-dvayaṁ pāda-tuṅgakam ।
Adhishṭhāna-samaṁ mañchaṁ mañchordhve'rdhena vapra-yuk ।
Sa-tripāda-shaḍaṁśena chordhve pādodayaṁ bhavet ।
Tadūrdhve prastarottuṅgaṁ sa-tri-pādaṁ tri-pādakam ।
Tadūrdhve'rdhena vapraṁ syāt tadūrdhve'ṅghri shaḍ-aṁśakam ।
(*M.*, XXI, 12–17.)

A subordinate pillar :

Mūla-pāda-viśālaṁ vā tat-tri-pāda-viśālakam ।
Etat kumbhāṅghrikaṁ proktam antarālaṁ cha yojayet ।
(*M.*, xv, 228–29.)

AṄGHRIKA-VĀRI—A moulding of the lamp-post (dīpa-daṇḍa) of the shape of a water-pot, a rope, a trap, a cover, or a band.

Agre cha phalakāntaṁ cha tāṭikādyair vibhūshitam ।
Athavāṅghrika-vāriṁ syād ūrdhve cha kuḍmalānvitam ।
(*M.*, L, 78–79.)

ACHALA-SOPĀNA (*see* SOPĀNA)—A flight of stationary or immovable steps.

Achalaṁ cha chalaṁ chaiva dvidhā sopānam īritam । —(*M.*, xxx, 90.)

See the contents of lines 93–124 under SOPĀNA.

Cf. Evaṁ tu chala-sopānam achalaṁ tat pravakshyate । (151)
Then follows the measurement (152–54).

AṬṬA, AṬṬĀLA—High, lofty.

AṬṬĀLAKA—An apartment on the roof, an upper storey, a tower, a military post.

AṬṬĀLIKĀ—'A house of two or more storeys, a lofty house palace.'—(*M.W.Dict.*)

(1) *Kauṭilīya-Artha-śāstra* :

Vishkambha-chaturaśram aṭṭālakam utsedha-samāvakshepa-sopānaṁ kārayet.

Trimśad-daṇḍāntaraṁ cha dvayor aṭṭālakayor madhye sa-harmyā-dvi-talām dvyardhāyāmāṁ pratolīṁ kārayet.

Aṭṭālaka-pratolī-madhye trī-dhānushkādhishṭhānaṁ sāpididhāna-chchhidra-phalaka-saṁhatam itīndrakośaṁ kārayet.—(Chap. xxiv, 52.)

(2) *Kāmikāgama*, xxxv :

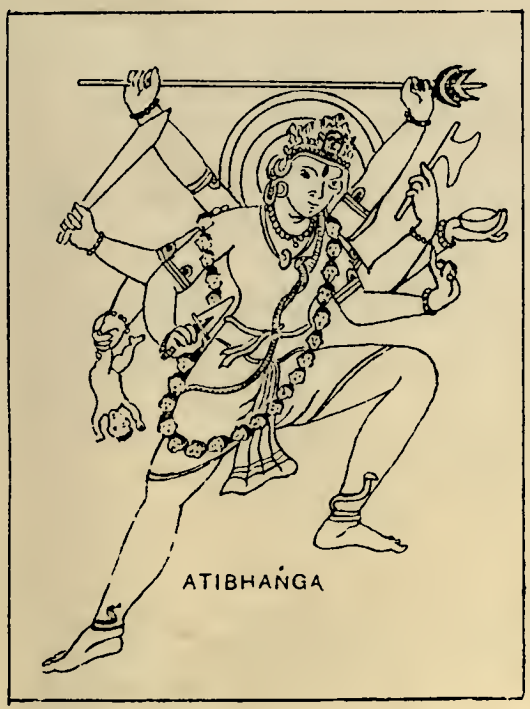
Agrato'lindakopetam aṭṭālaṁ sālakāntare ।
Gopurasya tu . . . ॥ (126).

(3) *Rājataraṅgini* :

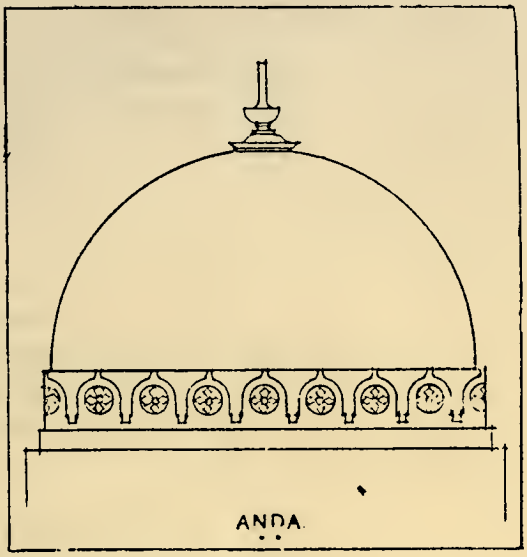
I. 274 : prākārāṭṭāla-maṇḍalam . . . kinnara-puram ।
I. 301 : nagaryaḥ . . . truṭyād aṭṭāla-mekhalāḥ ।

(4) *Mahābhārata* (Cock) :

II. 80, 30 : prākārāṭṭālakeshu ।
III. 15, 16 : purī . . . sāṭṭālakāgopurā ।
III. 160, 30 : Vaiśravaṇāvāsam . . . prākāreṇa parikshiptam ।
. . . chāyāṭṭālaka-śobhinam ।
III. 173, 3 : puram . . . gopurāṭṭālakopetam ।
III. 207, 7 : Mithilām . . . gopurāṭṭālakavatīm ।
XV. 5, 16 : puram aṭṭālaka-saṁbādham (with very high storey).
XVI. 6, 24 : nagarīm . . . prākārāṭṭalakopetām ।



ATIBHANGA



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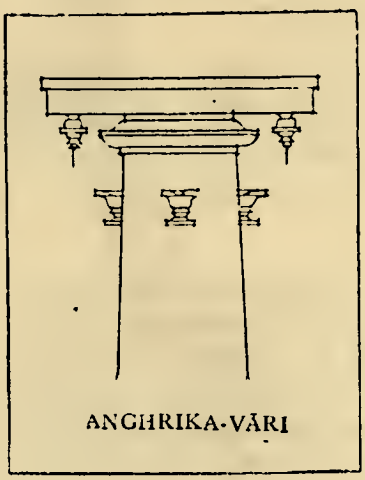
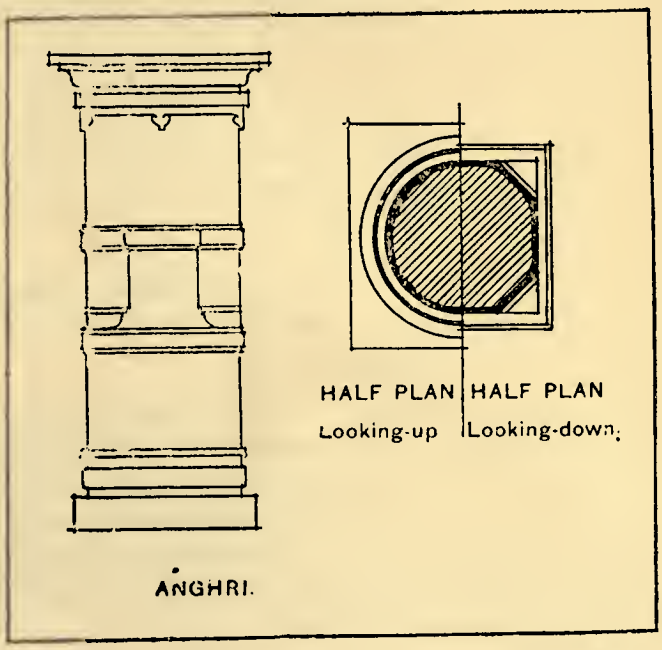


ANGHRIKA-VARI



ANGHRI.

(5) *Rāmāyaṇa* :

I. 5, 11 : Uchchāṭṭāla-dhvaja-vatīm śataghnī-śata-saṁkulām ।
Commentary : aṭṭāla upari gṛiham (*lit.* house at the top).
II. 6, 11 : Chaityeshvaṭṭālakeshu cha ।
Commentary : aṭṭālakaḥ prākāroparitana-yuddha-sthānam (aṭṭālakas imply the military towers built on the top of the enclosure walls).
V. 3, 33 : laṅkām . . . sāṭṭa-prākāra-toraṇām ।
V. 37, 39 : sāṭṭa-prākāra-toraṇāṁ laṅkām ।
V. 55, 32 : laṅkā sāṭṭa-prākāra-toraṇā ।
V. 51, 36 : purīṁ sāṭṭa-pratolīkām ।
V. 58, 158 : purīm sāṭṭa-gopurām ।
V. 2, 17 : laṅkām . . . aṭṭālaka-śatākīrṇām ।
V. 2, 21 : purīm . . . vapra-prākāra-jaghanām ।
śataghni-śula-keśāntām aṭṭālakāvataṁśakām ।
VI. 75, 6 : gopurāṭṭa-pratolīshu chāryāsu cha vividhāsu cha ।

(6) Turrets :

Giri-śikhara-taru-taṭ-āṭṭālak-opatalpa-dvāra-śaraṇochchhraya. Compare with : *Raghuvaṁśa.* XVI, 11, viśīrṇa talpāṭṭa śato niveśaḥ—(Kielhorn, *Junāgadh Rock Inscrip. of Rudradaman,* line 6, *Ep. Ind.*, Vol. VIII, pp. 43, 46 and note 3.)

AṆḌA—A cupola.

Shoḍaśāṇḍayutaḥ (furnished with 16 cupolas), vibhūshito'ṇḍaiś cha vimśatyā (adorned with 20 cupolas)—(*Bṛihat-Saṁhita,* LVI, 22, 24, 28 ; Kern, *J.R.A.S.*, N. S., Vol. VI, p. 319, 320).

Śobhanaiḥ patra-vallibhir aṇḍakaiś cha vibhūshitaḥ ।

(*Matsya-Purāṇa,* Chap. CCLXIX, v. 20, *see also* v. 37.)

ATI-BHAṄGA (*see* BHAṄGA)—A pose, in which the idol is bent n more than two or three places.

Sarveshāṁ deva-devināṁ bhaṅga-mānam ihochyate ।
Ābhaṅgaṁ sama-bhaṅgaṁ cha ati-bhaṅgam tridhā bhavet ।

(*M.*, LXVII, 95-96.)

Evaṁ tu sama-bhaṅgaṁ syād ati-bhaṅgam ihochyate ।
Parshṇyantaraṁ śarāṅgulyaṁ tat-pādāṅgushṭhayor antare ।
Tad dvayor madhyame viṁśad aṅgulyaṁ dvyantaraṁ bhavet ।
Taj-jānu-dvayor madhye dvyantaraṁ dvādaśāṅgulam ।
Ūru-mūla-dvayor madhye sārdha-dvyaṅgula-kāntakam ।
Evam ati-bhaṅgaṁ syād etāni yuktito nyaset । —(*ibid.*, 117-22.)

ADBHUTA (*see* UTSEDHA)—One of the five proportions of the measurement of the height; in this proportion the height is twice the breadth.

(1) *Mānasāra :*

Pañchadhotsedham utkṛishṭaṁ mānāt pañcha-vidhaṁ nāma ।
Śāntikaṁ paushṭikaṁ śreshṭhaṁ pārshṇikaṁ (also, jayadam) madhya-māne tu ।
Hinam tu dvayaṁ ta(*d*)-dvi-guṇoṁ chādbhutaṁ kathitam ।
Karā(samā)dhikodayam-harmye sarvakāmikam udīritam ।

(*M.*, XI, 20–22.)

Śāntikaṁ paushṭikaṁ jayadaṁ chādbhutaṁ uttuṅguṁ sarvakāmikam । —(*M.*, XI, 76).

A clear statement of the rule :

Tad-vistāra-samottuṅgaṁ sapādārdhaṁ tu tuṅgakam ।
Tri-pādāhikam utsedhaṁ vistāraṁ dvi-guṇodayam ॥
Prathamaṁ śāntikotsedhaṁ dvitīyaṁ paushṭikodayam ।
Tritīyaṁ jayadottuṅgaṁ chaturthaṁ dhanadodayam (i.e. sarvakāmikam) ।
Pañchamaṁ chādbhutotsedhaṁ janmādi-stupikāntakam ।

(*M.*, XXXV, 21–25.)

(2) *Kāmikāgama*, L, 24–28 :

A measurement of the height :

Śāntikaṁ pushṭi-jayadam adbhutaṁ sarvakāmikam ।
Utsedhe dvi-guṇa-vyāsaḥ pādādhikyaṁ cha sammatam ॥ (24).
Vistāra-dvi-guṇād ashṭāṁśādhikaṁ vādhiyojayet ।
Kshudrāṇām evam uddishṭam kanishṭhānām athochyate ॥ (25).
Saptāṁśe tu kṛite vyāse saptāṁśaṁ vā shaḍ-aṁśakam ।
Viṣṭārād adhikas tuṅgo madhya-mānam athochyate ॥ (26).
Vistāraṁ pūrvavat kṛitvā chatush-pañchādhikaṁ tu yat ।
Madhya-mānam idaṁ proktaṁ uttamānāṁ trayāṁśakam ॥
Pūrvam uddeśa-mānaṁ syād etaṁ nirddeśa-mānakam ॥ (27).
Eka-dvi-tri-karayor yuktaṁ māna-hīnaṁ tu vādhikam ।
Utsedhaṁ kalpayed dhīmān sarveshām api sadmanām ॥ (28).

(3) A class of the two-storeyed buildings.

(*See M.*, XX, 94, 28–33, under PRASĀDA.

A class of buildings—(*See Kāmikāgama*, XLV, 61*a*, under MĀLIKĀ.)

ADRI-SOPĀNA (*see* SOPĀNA)—A flight of steps for a hill :

Adri-sopāna-pārśve tu na kuryāt pārśvayo aṅghrikam ।

(*M.*, XXX, 163.)

Adri-sopāna-deśe tu dīrgha-mānaṁ yatheshṭakam । —(*ibid.*, 136.)
Adri-deśe samārohya yatra tatraiva kārayet । —(*ibid.*, 118.)

ADHIMAṆḌAPA—A pavilion built over and above another, a double-storeyed pavilion. (Pavilions are generally single-storeyed buildings, *see* MAṆḌAPA.)

Kshudra-devālayaṁ sarvaṁ pūrvavaj janmādim uditam ।
Maṇḍapaṁ nava-talaṁ kuryād bhavanam anya(madhya)-raṅgaṁ vādhimaṇḍapākāram—(*M.*, XII, 143–44).

ADHISHṬHĀNA—Etymologically (adhi-sthā, to stand) it denotes an object on which something stands. Hence it is the basement or the lowest member of a building. In the same way, it implies the stand or base of the column, being the member between the shaft and the pedestal, if there be any. Its identification with the base and the basement need not be questioned. It is clear beyond doubt by a comparison of the component parts and the offices it serves with the corresponding details (quoted below) of the Grecian and Roman architecture.

(1) *Kāmikagāma*, XXXV :

Yajamānasya jānvantaṁ nāvyantaṁ hṛidayāvadhi ।
Galāvadhi śiro'ntaṁ cha pādārdhaṁ vā tri-bhāgikam ॥ (22).
Tri(tra)yādi-shoḍaśa-bhāgānām adhikaṁ vokta-mānataḥ ।
Adhiṣṭhānasya mānam syāt . . . ॥ (23).
Talādhishṭhāna-pādebhyaḥ kiṁchid-una-pramāṇakam ॥ (114).
Mūla-dhāma-talottuṅgādhishṭhāna-tala-saṁyutam ।
Tad-vihīna-talaṁ vāpi sama-sthala-yutaṁ tu vā ॥ (116).
Adhishṭhānādi shaḍ-vargaṁ tan-mānam upapīṭhake ।
Dvārotsedhāya dātavyaṁ samaṁ vāpyadhikam tu vā ॥ (122).

Ibid., LV, 202 :

Masūrakam adhishṭhānaṁ vastvādhāraṁ dharātalam ।
Talaṁ kuṭṭimādyaṅgam adhishṭhānasya kīrtitam ॥

These are stated to be the synonyms of adhishṭhāna. But they appear as the component parts of it.

(2) *Suprabhedāgama*, XXXI :

Tato jāṅgala-bhūmiś ched adhishṭhānaṁ prakalpayet ।
Tach-chatur-vidham ākhyātam iha śāstre viśeshataḥ ॥ (16).
Padma-bandhaṁ chāru-bandhaṁ pāda-bandhaṁ prati-kramam ।
Vistārasya chaturthāṁśam adhishṭhānochchhrayaṁ bhavet ॥ (17).

(*See* the mouldings of these four bases under those terms.)

Pādāyāmam adhishṭhānaṁ dvi-guṇam sarva-sammatam ॥ (28).

(3) *Mānasāra*, Chap. XIV (named Adhishṭhāna, 1–412) :

Twelve kinds of heights (from one large span to four large cubits) to be employed in twelve storeyes, one above the other :

Trayodaśāṅgulam ārabhya shaṭ-shaḍ-aṅgula-vardhanāt ।
Chatur-hastāvasānaṁ syāt kuṭṭima (= adhishṭhāna)-dvā-daśonnatam ।
Eka-dvā-daśa-bhumyantam harmyāntaṁ tat kramāt nyaset । (2–4).

These heights vary in buildings of the different castes and ranks :

Viprāṇāṁ tu chatur-hastaṁ bhū-patināṁ trī-hastakam ।
Sārdha-dvi-hastam utsedhaṁ yuva-rājasya harmyake ।
Dvi-hastaṁ tu viśāṁ proktam eka-hastaṁ tu śūdrake । (5–7).

These heights are stated to be proportionate to the heights of the buildings :

Harmya-tuṅga-vaśāt proktaṁ tasya māsu(ū)rakonnatam ।
Janmādi-vājanāntaṁ syat kuṭṭimodayam īritam । (8–9).

The height of the base as compared with that of the pedestal :

Adhishṭhānonnate deśe chopapīṭhaṁ hi saṁśritam ।
Etaṁ tat-tvam adhishṭhānaṁ tuṅgaṁ tach chatur-aṁśakam ।
(*M.*, XIII, 2-3.)

The comparative heights of the base, pedestal and shaft or pillar :

In a Tamil fragment of a manuscript, purporting to be a translation of *Māyāmata* (? Mayamata), it is said : 'The height of the shaft or pillar is to be divided into four parts, and one to be given to the base, which may or may not be accompanied by a pedestal, and in the case where a pedestal is joined to the base, the height of the pedestal may be either equal to that of the base, or twice or three times as much.'—(Rām Rāz, *Ess. Arch. of Hind.*, p. 26.)

According to Rām Rāz, the passage, *M.*, XIII, 2–3, quoted above, is meant to imply that the height of the pedestal consists 'of from one-quarter to six times the height of the base.'—(*Ibid.*, p. 26.)

According to the *Mānasāra* (XXI, 13, *see* below) and the *Suprabhedāgama* (XXXI, quoted above) the base is half of the pillar (pāda). The *Kāmikāgama* does not give exact proportion, but says (XXXV, 114, *see* above) that the tala (the lowest part, or the pedestal and the base) is a little less (kiṁchid ūna) than the pillar or shaft (pāda).

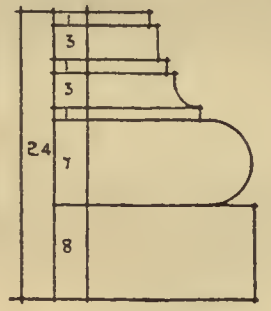
Compare also verses 22, 23 of the same *Āgama* quoted above.

The height of the base is sometimes included in that of the pillar :

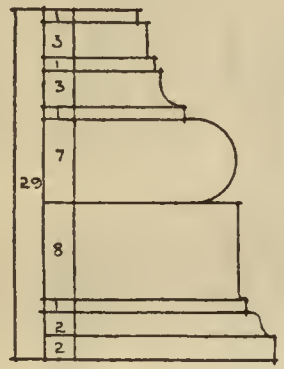
Pādāyāmāvasānaṁ cha adhishṭhānodayena cha । —(*M.*, XV, 9.)

THE BASES OF COLUMNS

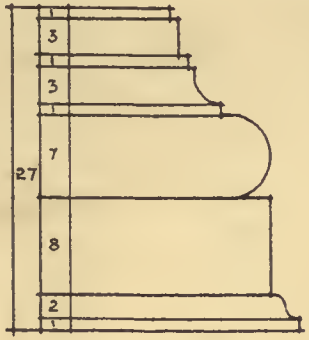
THE PĀDA-BANDHA CLASS



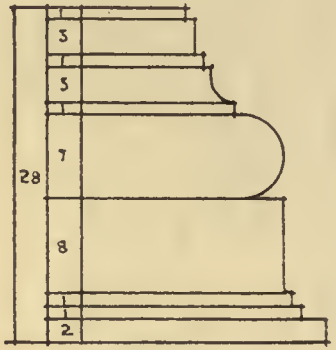
FIRST TYPE
OF 24 PARTS —



SECOND TYPE
OF 29 PARTS —



THIRD TYPE
OF 27 PARTS —



FOURTH TYPE
OF 28 PARTS —

Further comparative measurement of the base :

Athavā sapta-saptāṁśaṁ vibhajet tri-talodaye ।
Chatur-bhāgam adhishṭhānaṁ tad-dvayaṁ pāda-tuṅgakam ।
Adhishṭhāna-samaṁmañchaṁ mañchordhve'rdhena vaprayuk ।

(*M.*, XXI, 12–14.)

Adhishṭhāna implying the basement of a building :

Garbhāvaṭasya (of the foundation pit) nimnaṁ syād adhishṭhāna(ṁ)-samonnatam ।
Ishṭakair api pāshāṇaiś chaturaśraṁ samaṁ bhavet ।

(*M.*, XII, 6–7.)

The employment of various bases recommended, referring to the building of three storeys :

Nānādhishṭhāna-saṁyuktaṁ nānā-pādair alaṅkṛitam ।
Nānā-gopāna-saṁyuktaṁ kshudra-nāsyair vibhūshitam ।

(*M.*, XX, 65–66.)

The penalty for having a disproportionate base :

Adhishṭhānottuṅga-hīnaṁ syāt sthāna-nāśaṁ dhana-kshayam ।

(*M.*, LXIX, 20.)

The 64 types of bases :

Evaṁ chatuḥ-shashṭi-masūrakāṇi(=adhishṭhānam) śāstrokta-mānena vibhājitāni ।
Jñātvā prakurvann iha śilpi-varyas tad vāstu-bhartuḥ pradadāti saṁpat । —(*M.*, XIV, 393–96.)

These 64 bases are described under 19 technical class names (10–372) ; the details thereof are as follows :

Mānasāra, Chap. XIV (The mouldings are arranged in the successive order, as given in the text, from the bottom upwards) :

I.—Pāda-bandha (10–22) :

	Parts
(*a*) 24 parts :	
(1) Vapraka (plinth)	8
(2) Kumuda (astragal)	7
(3) Kampa (fillet)	1
(4) Karṇa (ear)	3
(5) Kampa (fillet)	1
(6) Paṭṭikā (band, fillet)	3
(7) Kampa (fillet)	1
(*b*) 29 parts :	
(1) Janman (plinth)	2
(2) Padma (cyma)	2
(3) Kampa (fillet)	1

The rest as before.

	Parts
(*c*) 29 parts :	
(1) Janman (plinth)	1
The rest as before.	
(*d*) 28 parts :	
(1) Janman (plinth)	2
(2) Kampa (fillet)	1
(3) Vapra (cavetto)	1
(4) Kandhara (dado)	2
The rest as before.	
II.—Uraga-bandha (23-43) :	
(*a*) 18 parts :	
(1) Vapra (plinth)	7
(2) Kumuda (astragal)	6
(3) Kampa (fillet)	1
(4) Kandhara (dado)	1
(5) Paṭṭa, (6) Paṭṭikā } (fillet)	2
(7) Kampa (fillet)	1
(*b*) 20 parts :	
(1) Vājana (fillet)	1
(2) Kandhara (dado)	2
(3) Vājana (fillet)	1
The rest as before.	
(*c*) 22 parts :	
(1) Kampa (fillet) above kumbha (pitcher) ..	1
(2) Karṇa (ear)	1
(3) Kampa (fillet)	1
(4) Kampa (fillet)	1
(5) Kandhara (dado)	1
(6) Vājana (fillet)	1
(7) Kandhara (dado)	3
(8) Gopānaka (beam)	2
(9) Prati-vājana (cavetto)	11
(*d*) 24 parts :	
(1) Vapra (plinth)	7
(2) Kumuda (torus) (the peculiarity of this part is that it is decorated with makara or shark), etc.	6
(3) Vājana (fillet)	1
(4) Kampana (fillet)	1
(5) Kampa (fillet)	1
(6) Prati-vājana (cavetto)	8

These four types of bases are shaped like the face of a snake and furnished with two pratis or . . . at the top : and their kumbha (pitcher) is circular. These are employed in the buildings of gods (i.e. temples), Brāhmans, and kings.

III.—Prati-krama (44–64) :

(*a*) 21 parts :

	Parts
(1) Kshudropāna (small plinth)	1
(2) Padma (cyma)	2½
(3) Kampa (fillet)	1½
(4) Vapra (cavetto)	7
(5) Dhārā-kumbha (supporting pitcher) ..	6
(6) Āliṅga (fillet)	1
(7) Antarita (fillet)	1
(8) Padma (cyma) or Kampa (fillet) Paṭṭa (band)	1 or 2

This base is decorated with elephants, horses, and makaras (sharks), etc. (XIV, 53).

(*b*) 22 parts (kumbhe kumudordhve viśeshataḥ, specially above the pitcher and torus) :

	Parts
(1) Āliṅga (fillet)	1
(2) Vājana (fillet)	1
(3) Kandhara (dado)	2
(4) Paṭṭika (band)	1
(5) Vājana (fillet) (this part is decorated with the carvings of trees and all ornaments) ..	1

The rest should be as before.

(*c*) 23 parts (Kumbhāntaṁ pūrvavat sordhve) :

(1) Kampa (fillet)	1
(2) Kandhara (dado)	1
(3) Kampa (fillet)	1
(4) Karṇa (ear)	2
(5) Vājana (fillet)	1

The rest should be as before.

(*d*) 24 parts :

(1) Kampana (fillet) (upper and lower)	1 each
(2) Antara(rita) (intervening fillet)	1
(3) Tripaṭṭa (three bands)	2
(4) Antara (intervening fillet)	1
(5) Pratima (? Prati-vājana=cavetto) ..	1
(6) Vājana (fillet)	1

The rest should be as before.

These are employed in the buildings of gods and three higher castes (XIV, 100–101).

IV.—Kumuda-bandha (65–77) :

(*a*) 27 parts :	*Parts*
(1) Janman (plinth)	2
(2) Ambuja (cyma)	2
(3) Kampa (fillet)	1
(4) Vapra (cavetto)	6
(5) Padma (cyma)	1
(6) Karṇa (ear)	1
(7) Aṁśu (filament)	1
(8) Padma (cyma)	1
(9) Kumuda (astragal)	3
(10) Padma (cyma)	1
(11) Padma (cyma)	1
(12) Karṇa (ear)	1
(13) Kampa (fillet)	1
(14) Abja (cyma)	1
(15) Paṭṭa (band)	2
(16) Abja (cyma)	1
(17) Kampa (fillet)	1
(*b*) 27 parts (paṭṭike tu viśeshataḥ) :	
Gopāna (beam)	2

Some authorities recommend Tripaṭṭa in place of kumuda (astragal) which should be equal to the nāga or snake.

Paṭṭas (bands) in the middle are decorated with flowers and jewels.

It is supplied with a declivity (kaṭaka) or it may be circular.

Kumuda (astragal) may be triangular or hexagonal.

In this way, *eight kinds* of (such) bases should be made : Evam ashṭa-vidhaṁ kuryāt.

V.—Padma-kesara (suitable for all buildings) (78–91) :

(*a*) 19 parts :	*Parts*
(1) Janman (plinth)	2
(2) Vapra (cavetto)	4
(3) Padma (cyma)	½
(4) Kandhara (dado)	½
(5) Ardha-padma (half cyma)	½
(6) Kumuda (astragal)	1
(7) Padma (cyma)	1½
(8) Kampa (fillet)	1½
(9) Karṇa (ear)	2

	Parts
(10) Kampa (fillet)	½
(11) Padma (cyma)	½
(12) Paṭṭika (band)	2
(13) Padma (cyma)	1
(14) Kampa (fillet)	1

(*b*) 19 parts :

(1) Janman (plinth)	1½
(2) Kampa (fillet)	½

The rest should be as before.

(*c*) 19 parts :

(1) Janman (plinth)	1
(2) Padma (cyma)	½

The rest should be as before.

(*d*) 19 parts :

In this last sort of this base, there is a slight difference (kiñchit śesham viśeshataḥ). There should be two paṭṭikas or (one) kapota and the rest as before.

VI.—Pushpa-pushkala (suitable, as stated, for all the storeys of the buildings of the small, intermediate, and large sizes) (92–108) :

(*a*) 32 parts :

	Parts
(1) Janman (plinth)	2
(2) Vājana (fillet)	1
(3) Mahā-padma (large cyma)	7
(4) Karṇa (ear)	1
(5) Ambuja (cyma)	1
(6) Kumbha (pitcher)	4
(7) Padma (cyma)	1
(8) Kampa (fillet)	1
(9) Gala (dado)	3
(10) Kampa (fillet)	1
(11) Gala (dado)	1
(12) Gopāna (beam)	4
(13) Āliṅga (fillet)	1
(14) Antarita (fillet)	1
(15) Prati-mukha (a face-like ornament) ..	2
(16) Vājana (fillet)	1

(*b*) 32 parts :

Padma (cyma) above the large portion is one part more and the rest should be as before.

(*c*) 32 parts :

The cyma above the plinth is one part and the rest should be as before.

(*d*) 32 parts :

	Parts
(1) Kampa (fillet) below mahāmbuja (large cyma)	1
(2) Mahāmbuja (large cyma)	6

The rest should be as before.

VII.—Śrī-bandha (suitable for the palaces of emperors and the temples of Vishṇu and Śiva) (109-22) :

(*a*) 26 parts :

	Parts
(1) Janman (plinth)	1
(2) Vapra (cavetto)	6
(3) Kumuda (torus)	6
(4) Karṇa (ear)	1
(5) Karṇa (ear)	4
(6) Kampa (fillet)	1
(7) Padma (cyma)	1
(8) Gopāna (beam)	1
(9) Āliṅga (fillet)	1
(10) Antarita (fillet)	1
(11) Prati-vaktra (a face-like ornament) ..	2
(12) Vājana (fillet)	1

(*b*) 26 parts :

(1) Janman (plinth)	2
(2) Pratika (=Prati-vaktra, a face-like ornament)	1

The rest should be as before.

(*c*) 26 parts :

(1) Kshepaṇa (above Janman or plinth) (projection)	1
(2) Gopāna (beam)	½
(3) Āliṅga (fillet)	1
(4) Antarita (fillet)	1
(5) Prati-vaktra (a face-like ornament) ..	1
(6) Ardha-vājana (half fillet)	½

The rest should be as before.

(*d*) 26 parts :

(1) Janman (plinth)	1
(2) Abjaka (small cyma)	1
(3) Kampa (fillet)	1

The rest should be as before.

VIII.—Mañcha-bandha (for temples and palaces) (123–143) :

(*a*) 26 parts :

	Parts
(1) Janman (plinth)	½
(2) Padma (cyma)	2
(3) Kampa (fillet)	2
(4) Kampa (fillet)	2
(5) Vapra (cavetto)	6
(6) Kumbha (pitcher)	4
(7) Kampa (fillet)	1
(8) Kandhara (dado)	2
(9) Kampa (fillet)	1
(10) Paṭṭa (band)	1
(11) Kshepaṇa (projection)	1
(12) Āliṅga (fillet)	½
(13) Kampa (fillet)	1
(14) Prati (fillet)	1½
(15) Vājana (fillet)	½

This is decorated with the carvings (rūpa) of vyālas (snakes) lions, and sharks, etc. (137).

(*b*) 26 parts :

	Parts
(1) Janman (plinth)	2
(2) Ambuja (cyma)	2
(3) Kshepaṇa (projection)	1
(4) Vapra (cavetto)	6
(5) Kumuda (torus)	4
(6) Kampa (fillet)	1
(7) Kandhara (dado)	2
(8) Kampa (fillet)	1
(9) Paṭṭikā (band)	2
(10) Kampa (fillet)	1
(11) Karṇa (ear)	1
(12) Vājana (fillet)	1
(13) Prati (fillet)	1
(14) Vājana (fillet)	1

(*c*) 26 parts :

The Kumuda and prati are furnished with a tripaṭṭa (threefold band) ; and the rest as before, and the ornaments also are the same.

(*d*) 26 parts :

	Parts
(1) Paṭṭika (fillet) same as before ;	
(2) Kandhara (dado)	1

The rest as before.

(*e*) 26 parts :

The Paṭṭika is the same but the Kandhara above is one part, and the rest as before. The ornaments should be discreetly made (148).

IX.—Śreṇi-bandha (for temples and all other buildings) (144–169) :

(*a*) 18 parts :

	Parts
(1) Janman (plinth)	1½
(2) Kshudra-kampa (small fillet)	½
(3) Mahāmbuja (large cyma)	5
(4) Kandhara (dado)	1
(5) Abja (cyma)	1
(6) Kumbha (pitcher)	3
(7) Padma (cyma)	1
(8) Ālińga (fillet)	1
(9) Vājana (fillet)	1
(10) Prati (fillet)	2
(11) Vājana (fillet)	1

(*b*) 22 parts :

(1) Janman (plinth)	2
(2) Kshudra-kshepaṇa (small projection) ..	½
(3) Ambuja (cyma)	4½
(4) Kandhara (dado)	1
(5) Abjaka (small cyma)	1
(6) Kumbha (pitcher)	3
(7) Padma (cyma)	1
(8) Kampa (fillet)	1
(9) Kandhara (dado)	2
(10) Kshepaṇa (projection)	1
(11) Padma (cyma)	1
(12) Paṭṭikā (band)	2
(13) Padma (cyma)	1
(14) Vājana (fillet)	1

(*c*) 23 parts :

(1) Pāduka (plinth)	2½
(2) Kampa (fillet)	½
(3) Mahāmbuja (large cyma)	5
(4) Kandhara (dado)	1
(5) Padma (cyma)	1
(6) Kumuda (astragal)	3
(7) Padma (cyma)	1

	Parts
(8) Kampa (fillet)	1
(9) Kandhara (dado)	1
(10) Vājana (fillet)	1
(11) Antarita (fillet)	3
(12) Prati (fillet)	2
(13) Vājana (fillet)	1

(*d*) 24 parts :

(1) Janman (plinth)	1
(2) Kshudra-padma (small cyma)	1
(3) Vājana (fillet)	1
(4) Mahā-padma (large cyma)	5
(5) Dala (petal)	1

The rest as before.

These are decorated with lions, etc. (174).

X.—Padma-bandha (for the temples of gods and goddesses) (170-194):

(*a*) 21 parts :

	Parts
(1) Janman (plinth)	1
(2) Padma (cyma)	1
(3) Kampa (fillet)	1
(4) Kumbha (pitcher)	1
(5) Kshepaṇa (projection)	1
(6) Adhaḥ-padma (lower cyma)	3
(7) Karṇa (ear)	1
(8) Kampa (fillet)	2
(9) Paṭṭikā (band)	2
(10) Kampa (fillet)	1
(11) Kandhara (dado)	1
(12) Paṭṭa (band)	2

(*b*) 21 parts :

(1) Upāna (plinth)	3
(2) Padma (cyma)	1
(3) Kumuda (astragal)	5
(4) Kampa (fillet)	1
(5) Padma (cyma)	4
(6) Kampa (fillet)	1
(7) Gala (dado)	2
(8) Kshepaṇa (projection)	1
(9) Padma (cyma)	1
(10) Kapota (dove-cot)	2
(11) Kampa (fillet)	1

(*c*) 21 parts : *Parts*

(1) Abja (cyma) as before ;	
(2) Kampa (fillet)	1
(3) Karṇa (ear)	2
(4) Kampa (fillet)	1
(5) Antarita (fillet)	2
(6) Prati (fillet)	1
(7) Vājana (fillet)	1

The rest as before.

(*d*) 19 parts :

(1) Janman (plinth)	3
(2) Padma (cyma)	1
(3) Kandhara (dado)	1
(4) Padma (cyma)	1
(5) Kumbha (pitcher)	5
(6) Padma (cyma)	1
(7) Kampa (fillet)	1
(8) Karṇa (ear)	1
(9) Padma (cyma)	1
(10) Kapota (dove-cot)	1
(11) Āliṅga (fillet)	1
(12) Antarita (fillet)	1
(13) Prati-vājana (fillet)	1

These are discreetly adorned with grāhas (sharks), lions, etc. (203).

XI.—Kumbha-bandha (195–239) :

(*a*) 24 parts : *Parts*

(1) Janman (plinth)	2
(2) Padma (cyma)	2
(3) Kampa (fillet)	1
(4) Karṇa (ear)	3
(5) Kampa (fillet)	1
(6) Paṭṭikā (band)	1
(7) Kampa (fillet)	1
(8) Padma (cyma)	1
(9) Karṇa (ear)	1
(10) Padma (cyma)	1
(11) Kumbha (pitcher)	3
(12) Padma (cyma)	1
(13) Nimna (drip)	1
(14) Kampa (fillet)	1
(15) Nimna (drip)	1
(16) Prati (fillet)	1

	Parts
(*b*) 24 parts :	
(1) Kumbha (pitcher)	1
(2) Nimnaka (drip)	½
(3) Janman (plinth)	2
(4) Padma (cyma)	2
(5) Nimna (drip)	1
(6) Kumbha (pitcher)	1
(7) Kampa (fillet)	1
(8) Kandhara (dado)	1
(9) Kampa (fillet)	1
(10) Kampa (fillet)	1
(11) Kapota (dove-cot)	1
(12) Vājana (fillet)	1
(13) Padma (cyma)	1½
(14) Nimna (drip)	1
(15) Padma (cyma)	1½
(16) Kumbha (pitcher)	1
(17) Padma (cyma)	1½
(18) Nimna (drip)	1
(19) Kshepaṇa (projection)	1
(20) Nimna (drip)	1
(21) Prati (fillet)	1
(*c*) 24 parts :	
(1) Janman (plinth)	2
(2) Padma (cyma)	2
(3) Kandhara (dado)	1
(4) Kumbha (pitcher)	1
(5) Nimna (drip)	1
(6) Kshudra-paṭṭa (small band)	1
(7) Abja (cyma)	1
(8) Kapota (dove-cot)	2
(9) Kshepaṇa (projection)	1
(10) Padma (cyma)	1½
(11) Kandhara (dado)	1½
(12) Padma (cyma)	1½
(13) Kumbha (pitcher)	3
(14) Adhaḥ-padma (lower cyma)	1
(15) Kandhara (dado)	1
(16) Kampa (fillet)	1
(17) Kshudrābja (small cyma)	1½
(18) Kapota (dove-cot)	2(?½)
(19) Prati-vājana (fillet), the remainder.	

(*d*) 26 parts :

	Parts
(1) Janman (plinth)	2
(2) Padma (cyma)	2
(3) Kampa (fillet)	1
(4) Kandhara (dado)	2
(5) Kampa (fillet)	1
(6) Padma (cyma)	1
(7) Paṭṭikā (band)	2
(8) Padma (cyma)	1
(9) Āliṅga (fillet)	1
(10) Padma (cyma)	1
(11) Kumbha (pitcher)	3
(12) Padma (cyma)	1
(13) Padma (cyma)	1
(14) Kendra (central part) . ..	2
(15) Kampa (fillet)	1
(16) Abja (cyma)	1
(17) Kapota (dove cot)	1
(18) Kampa (fillet)	1

The rest should be discreetly made.

These should be decorated with sharks, etc. and kshudra-nāsi (small nose) (246).

This is stated to be of five kinds [*see* (*b*) (1), (2) above] specially in the Kumbha part (247).

These may be circular, triangular (tri-paṭṭa), rectangular (? dhārāya), and should be furnished with kaṭakas. These are suitable for temples and palaces (248).

XII.—Vapra-bandha (240–248) :

(*a*) (?) 31 parts :

	Parts
(1) Janman (plinth)	2
(2) Kampa (fillet)	½
(3) Padma (cyma)	1½
(4) Vājana (fillet)	½
(5) Vapra (cavetto)	3½
(6) Padma (cyma)	1½
(7) Kampa (fillet)	½
(8) Kandhara (dado)	2
(9) Kampa (fillet)	½
(10) Padma (cyma)	½
(11) Paṭṭikā (band)	1
(12) Padma (cyma)	½

	Parts
(13) Vājana (fillet)	½
(14) Karṇa (ear)	4
(15) Kshepaṇa (projection)	1
(16) Ambuja (cyma)	½
(17) Kapota (dove-cot)	2
(18) Prati-vājana (fillet)	1

XIII.—Vajra-bandha (249–259) :

(*a*) 31 parts :

	Parts
(1) Janman (plinth)	1
(2) Kampa (fillet)	½
(3) Padma (cyma)	1½
(4) Kampa (fillet)	½
(5) Kandhara (dado)	½
(6) Kampa (fillet)	½
(7) Padma (cyma)	½
(8) Vajra-kumbha (round pitcher)	2
(9) Saro-ruha (cyma)	½
(10) Kampa (fillet)	½
(11) Karṇa (ear)	1
(12) Kampa (fillet)	½
(13) Ambuja (cyma)	½
(14) Kapota (dove cot)	2
(15) Prati-vājana (fillet)	1
(16) Kandhara (dado)	2
(17) Kampa-padma (fillet and cyma)	1
(18) Vajra-paṭṭa (round band)	2
(19) Padma-kampa (cyma and fillet)	1

XIV.—Śrī-bhoga (260–280) :

(*a*) 27 parts :

	Parts
(1) Janman (plinth)	2½
(2) Kshudra-kampa (small fillet)	½
(3) Ambuja (cyma)	3
(4) Kshudra-padma (small cyma) (it is attached to the small karṇa, line 275) ;	½
(5) Karṇa (ear)	1
(6) Kampa (fillet)	⅓
(7) Kshudrābja (small cyma)	3(?½)
(8) Kumuda (astragal)	3
(9) Padma (cyma)	½

	Parts
(10) Kshepaṇa (projection)	½
(11) Karṇa (ear)	1
(12) Kampa (fillet)	½
(13) Padma (cyma)	½(?1)
(14) Paṭṭikā (band)	1
(15) Padma (cyma)	½
(16) Kampa (fillet)	½
(17) Kandhara (dado)	2
(18) Kampa padma (fillet and cyma)	1(?1+1)
(19) Kapotaka(dove-cot)	2
(20) Āliṅga (fillet)	2

(*b*) 27 parts :

	Parts
(1) Janman (plinth)	2
(2) Kshudropāna (small plinth)	1
(3) Mahāmbuja (large cyma)	3
(4) Kshudra-paṅkaja (small cyma)	½
(5) Kampa-karṇa (fillet and ear)	½
(6) Kampa-padma (fillet and cyma)	1
(7) two Kapotas (dove-cots)	2
(8) Gala (dado)	1
(9) Prati-vājana (fillet)	1
(10) Gala (dado)	½
(11) Padma-kampa (cyma and fillet)	1
(12) Paṭṭikā (band)	2
(13) Gala (dado)	½
(14) Vājana (fillet)	½
(15) Kampa (fillet)	½
(16) Padma (cyma)	2½
(17) Kapota (dove-cot)	2½
(18) Prati(ma) (fillet)	2

XV.—Ratna-bandha (281–296) :

(*a*) 26 parts :

	Parts
(1) Janman (plinth)	1½
(2) Kshudra-vājana (small fillet)	½
(3) Vapra (cavetto)	1(?3)
(4) Padma (cyma)	1
(5) Āsana (seat)	1
(6) Ratna-vapra (jewelled cavetto)	4½
(7) Kampa (fillet)	4½
(8) Nimna (drip)	½

	Parts
(9) Kampa (fillet)	½
(10) Abja (cyma)	½
(11) Ratna-kampa (jewelled fillet)	2
(12) Kampaja (fillet)	½
(13) Kampa (fillet)	½
(14) Kandhara (dado)	2
(15) Kampa padma (fillet and cyma)	1
(16) Ratna-paṭṭa (jewelled fillet)	1
(17) Padma-kampa (cyma and fillet)	1
(18) Karṇa (ear)	1½
(19) Vājana (fillet)	½
(20) Abja (cyma)	½
(21) Kapota (dove-cot)	2
(22) Āliṅga (fillet)	1½
(23) Prati-vājana (fillet), the remainder.	

This part is adorned with the carvings of snakes and sharks, etc., and all other parts are decorated with jewelled lotuses. This base should be made in the temples of Śiva and Vishṇu (lines 307–309).

XVI.—Paṭṭa-bandha (297–304) :

26 parts :

	Parts
(1) Janman (plinth)	2
(2) Vājana (fillet)	½
(3) Mahābja (large cyma)	2½
(4) Padma-kampa (cyma and fillet)	1
(5) Nimna-kampa (drip and fillet)	1
(6) Padma (cyma)	1
(7) Mahā-paṭṭa (large band)	2
(8) Padma-kampa (cyma and fillet)	1
(9) Kandhara (dado)	1
(10) Kshepaṇa-abja (projection and cyma) ..	5
(11) Kapota (dove-cot)	2
(12) Prati-vājana (fillet), the remainder.	

This is adorned with all ornaments (line 318).

XVII.—Kaksha-bandha (305–346) :

(*a*) 18 parts :

	Parts
(1) Janman (plinth)	2
(2) Kampa (fillet)	½
(3) Mahāmbuja (large cyma)	2½
(4) Padma-kampa (cyma and fillet) . ..	1
(5) Nimna (drip)	1

	Parts
(6) Antarita (fillet)	1
(7) Prati (fillet)	½
(8) Vājana (fillet)	1
(9) Kandhara (dado)	1
(10) Kampa-padma (fillet and cyma)	1
(11) Vṛitta-kumbha (round pitcher)	2
(12) Padma-kshepaṇa (cyma and projection) ..	1
(13) Karṇa (ear)	1
(14) Kampa-padma (fillet and cyma)	1
(15) Kapota (dove-cot)	1½
(16) Vājana (fillet)	½

This is adorned with all ornaments, and sharks and snakes, etc. (line 328).

(*b*) 19 parts :

	Parts
(1) Janman (plinth)	1
(2) Padma (cyma)	½
(3) Kampa (fillet)	½
(4) Mahāmbuja (large cyma)	2
(5) Padma-nimna (cyma and drip)	1
(6) Abja (cyma)	½
(7) Kumuda (astragal)	1½
(8) Abja (cyma)	½
(9) Karṇa (ear)	½
(10) Abja (cyma)	½
(11) Paṭṭikā (band)	1½
(12) Padma-kampa (cyma and fillet)	1
(13) Nimnaka (drip)	½
(14) Antarita (fillet)	½
(15) Prati (fillet)	1
(16) Vājana (fillet)	½
(17) Kandhara (dado)	1
(18) Kampa (fillet)	½
(19) Padma (cyma)	½
(20) Kapota (dove-cot)	1½
(21) Vājana (fillet)	1
(22) Prati-bandha (fillet and band)	1

The rest should be as before and it should be decorated with all ornaments (line 340).

(*c*) 26 parts :

	Parts
(1) Janman (plinth)	1
(2) Kampa (fillet)	1

	Parts
(3) Kandhara (dado)	2
(4) Kampa (fillet)	1
(5) Padma (cyma)	1
(6) Kampa (fillet)	1
(7) Argala (bar)	1
(8) Kampa (fillet)	1
(9) Padma (cyma)	1
(10) Kapota (dove-cot)	2
(11) Prati-vājana (fillet), the remainder.	

Paṭṭa-kampa, Kapota, and the two Paṭṭas may be circular (line 348).

The parts of the two lower karṇas are adorned with images of snakes, etc. (line 349).

(*d*) 24 parts :

	Parts
(1) Janman (plinth)	3
(2) Kampa (fillet)	1
(3) Nimna (drip)	1
(4) Bhadras (projecting ornaments)	5(each)
(5) Kampa (fillet)	1
(6) Nimnaka (drip)	1
(7) Antarita (fillet)	1
(8) Prati (fillet)	1
(9) Kampa (fillet)	1
(10) Kandhara (dado)	1
(11) Kampa (fillet)	1
(12) Padma (cyma)	1
(13) Kapota (dove-cot)	3
(14) Kandhara (dado)	1
(15) Prati (fillet)	1
(16) Kumbha (pitcher)	8
(? octangular).	

There should be Bhadra-paṭṭa (front fillet) and Patra-paṭṭa (leaf fillet) in the Kapota part (line 359).

XVIII.—Kampa-bandha (347–358) :

36 parts :

	Parts
(1) Tuṅga (elevation)	4
(2) Kshudra-upāna (small plinth)	1
(3) Mahābja (large cyma)	5
(4) Kshudrābja (small cyma)	1
(5) Kampa (fillet)	1

	Parts
(6) Nimna (drip)	1
(7) Vājana (fillet)	1
(8) Padma (cyma)	1
(9) Kumbha-mahābja (pitcher and cyma) ..	5
(10) Abja (cyma)	1
(11) Kampa (fillet)	1
(12) Āliṅga (fillet)	1
(13) Antarita (fillet)	1
(14) Prati (fillet)	2
(15) Vājana (fillet)	1
(16) Kshepaṇa (projection)	1
(17) Kandhara (dado)	1
(18) Kampa (fillet)	1
(19) Padma (cyma)	1
(20) Kapota (dove-cot)	3
(21) Āliṅga (fillet)	1
(22) Prati (fillet)	1

XIX.—Śri-kānta (359–372) :

36 parts :

	Parts
(1) Upāna (plinth)	3
(2) Kshudropāna (small plinth)	1
(3) Mahāmbuja (large cyma)	8
(4) Kshudrābja (small cyma)	1
(5) Kandhara (dado)	1
(6) Padma (cyma)	1
(7) Paṭṭikā (band)	3
(8) Kshudra-kampa (small fillet)	1
(9) Padma (cyma)	4
(10) Kshudrābja (small cyma)	1
(11) Nimna (drip)	1
(12) Padma (cyma)	1
(13) Kumbha (pitcher)	3
(14) Kampa (fillet)	1
(15) Kshepaṇa (projection)	1
(16) Kandhara (dado)	2
(17) Kampa (fillet)	1
(18) Padma (cyma)	1
(19) Kapota (dove-cot)	1
(20) Āliṅga (fillet)	1
(21) Prati (fillet)	1

This Śri-kānta is stated to be of four kinds (line 376) but only one type is illustrated.

In the kumbha-part it should be round or there should be paṭṭa (line 372). These should be constructed in the temples of Śiva and Vishṇu (line 387).

Projections (lines 318–409) :

Projections are the peculiarities of the mouldings from the plinth to the crowning fillet :

Janmādi-vājanāntaiṁ cha aṁśānāṁ tad viśeshataḥ । (373)

These projections vary from being equal to one-fourth of the mouldings (lines 376–384) :

Tat-samaṁ nirgamaṁ vāpi tri-pādam ardhārdham eva cha ।
Tad-eva kshepaṇaṁ sarve yathā-śobhaṁ tu kārayet ।
Upāna-tuṅga-samaṁ vāpi tat-pādona-vivardhanāt ।
Tuṅgena tri-vidhānām cha tri-pādaṁ nirgamaṁ bhavet ।
Vaprochchaṁ tu samaṁ vāpi yāvat kumuda-nirgamam ।
Kumudochchaṁ vapra-paṭṭāntaṁ paṭṭikā-nirgamaṁ bhavet ।
Tat-samaṁ nirgamaṁ vāpi paṭṭaṁ gopāna-nirgamaṁ ।
Kshudra-paṅkaja-sarveshāṁ tat-samaṁ nirgamaṁ bhavet ।
Yathā-śobhaṁ balāt sarvam aṅgānāṁ sahito(-aṁ) nyaset ।

These general rules are illustrated by giving in daṇḍa (rod) and hasta (cubit) measures the projections of some plinth (lines 402–409).

For a comparative study and general knowledge of the subject the details of the bases employed in early European architecture are given below. Each column has its particular base :

I.—Tuscan order (Gwilt, *Encycl.*, Art. 2555):

Base of the column 12 parts :

		Projection from the axis of column in parts of a module
(1) Fillet	1	$13\frac{1}{2}$
(2) Torus	5	$16\frac{1}{2}$
(3) Plinth ..	6	$16\frac{1}{2}$

II.—Doric order (Art. 2565) :

Base of the column 12 parts :

		Projection
(1) Apophyge or congé ..	2	12
(2) Fillet	$\frac{2}{3}$	14
(3) Astragal	$1\frac{1}{3}$	$14\frac{3}{4}$
(4) Torus	4	17
(5) Plinth	$\frac{6}{14}$	17

Grecian Doric :

Cornice—15·32 parts ; Entablature—Frieze 14·88 parts ; architrave 17·10 parts ; Capital—11·16 parts.

Column (proper)—Shaft 20·30 modules ; 1st step or plinth 6·90 ; 2nd step or plinth 6·70 ; 3rd step or plinth 6·90.

III.—Ionic order (Art. 2573) :

Base of the column 19½ parts, excluding apophyge 2 parts and projection 18 :

		Projection in parts of a module from axis of the column
(1) Fillet	1½	20
(2) Torus	5	22½
(3) Fillet	¼	20½
(4) Scotia	2	20
(5) Fillet	¼	22
(6) Two beads	2	22½
(7) Fillet	¼	22
(8) Scotia	2	21
(9) Fillet	¼	24
(10) Plinth	6	25

Grecian Ionic (art. 2581) :

Base of the column 33.27 parts :

(1) Apophyge	1·080	
(2) Fillet	0·450	18·960
(3) Bead	1·080	19·320
(4) Torus (horizontally fluted)	6·120	22·500
(5) Fillet	0·450	22·500
(6) Scotia	6·000	21·840
(7) Fillet	0·450	23·640
(8) Torus	5·760	24·960
(9) Plinth	11·880	26·520

IV.—Corinthian order (Art. 2582) :

Base of the column 14½ parts :

	Height in parts of a module	Projection in parts of a module
(1) Torus	3	22
(2) Fillet	¼	20½
(3) Scotia	1½	20
(4) Fillet	¼	21⅝

	Height in parts of a module	Projection in parts of a module
(5) Two beads	1	22
(6) Fillet	$\frac{1}{4}$	$21\frac{5}{8}$
(7) Scotia	$1\frac{1}{2}$	$21\frac{1}{8}$
(8) Fillet	$\frac{1}{4}$	23
(9) Torus	4	25
(10) Plinth	6	25

V.—Composite order (Art. 2591) :

The base of the column 18 parts :

	Height in parts of a module	Projection in parts of a module
(1) Congé	2	20
(2) Fillet	$1\frac{1}{2}$	20
(3) Torus	3	22
(4) Fillet	$\frac{1}{4}$	$20\frac{1}{2}$
(5) Scotia	$1\frac{1}{2}$	20
(6) Fillet	$\frac{1}{4}$	$21\frac{1}{3}$
(7) Bead	$\frac{1}{2}$	$21\frac{2}{4}$
(8) Fillet	$\frac{1}{4}$	$21\frac{1}{3}$
(9) Scotia	2	$20\frac{2}{3}$
(10) Fillet	$\frac{1}{4}$	23
(11) Torus	4	25
(12) Plinth	6	25

From the details given above it would be easy to understand and subscribe to the following remark :

'The Indian (pedestals and) bases are made more systematically, and afford by far a greater variety of proportions and ornaments than the Grecian and Roman. In the European architecture, the forms and dimensions of pedestals and bases are fixed by invariable rules, with respect to the orders in which they are employed, but in the Indian, the choice is left to the option of the artists.'—(Rām Rāz *Ess. Arch. of Hind.*, pp. 39-40 and *see* Plate II.)

ANANTA (*see* LUPĀ)—A kind of lupā or 'a sloping and projecting member of the entablature representing a continued pent-roof.'

Ambaraṁ cha vyayaṁ jyotir gaganaṁ cha vihāyasi ।
Anantaṁ chāntarīkshaṁ cha prastaraṁ (? pushkalaṁ) chāshṭadhā lupāḥ ।—(*M.*, XVIII, 174-175.)

ANU-GṚIHA—The roof of a house.

Cf. Karṇa-kīlāya-saṁbandho'nugṛihaṁ setuḥ—'The fastening of the *roof* of a house to the transverse beam by means of iron bolts is called Setu.'—(*Kauṭilīya-Artha-sāstra*, Chap. LXV, p. 166.)

ANU-ŚĀLĀ (*cf.* Śālā)—An ante-chamber, a hall or room behind or at the side of a main hall.

Mānasāra, XXVI : 9, 19, 23 :

(*a*) Shoḍaśāṁśakam ādhikyaṁ bhāgaṁ harmya-viśālakam । (7)
Ekāṁśaṁ karṇa-kūṭaṁ syād dhārāntara(ṁ) śivāṁśakam । (8)
Dvi-bhāgenānu-śālā cha tad-ardhaṁ chāntarālakam । (9)
Saptāṁśena mahā-śālā harmyam etat tu vinyaset । (10)

(*b*) Athavāshṭādaśāṁśe tu kūṭa-hārā cha pūrvavat ।(16)
Shaḍ-bhāgena mahā-śālā chatuḥ-śālā tri-bhāgikam । (17)
Madhya-śālā yugāṁśena bhadra-śālā cha madhyame । (18)
Anuśālā cha madhye cha chaika-bhāgena bhadrakam । (19)

(*c*) Ekona-viṁśad-aṁśena ashṭa-bhūmi-viśālake । (21)
Ekaika-kūṭa-vistāraṁ mahā-śālā sarāṁśakam । (22)
Anuśālā tri-bhāgā vā bhā(hā)rāntara(ṁ) dvi-bhāgikam । (23)
Mahā-śālā tri-bhāgena bhadra-śālā viśālatā । (24)

ANEKA-LIṄGA (*see* Liṅga)—A class of the phallus, phalli in group as exist in many places.

Vedāśraṁ vasvaśrakaṁ vā vṛittaṁ chaivaṁ proktāneka-liṅga-mūle ।

Ekānekān chokta-liṅge śivāṁśe kuryād dhārā shoḍaśādi-dvayena ।

(*M.*, LII, 128–129, 132–133.)

ANILA-BHADRAKA—A kind of chariot.

(*See M.*, XLIII, 114, under Ratha)

ANTARA (*see* Antarita)—Literally the distance between any two objects, hence it implies a moulding which separates two other larger mouldings. In this office it would resemble the fillet, listel or annulet (*see* Gwilt, Art. 2532, fig. 874). A moulding of the pedestal and the base.

Shaḍ-aṁśaṁ chāntare karṇe uttarāṁśaṁ tad-ūrdhake ।

(*M.*, XIII, 121.)

Purvottara-pradeśe tu kampanaṁ chāntarāṁśakam ।
Dviṁśakaṁ cha tri-paṭṭaṁ syāt tad-ūrdhve chāntarāṁ bhavet ।

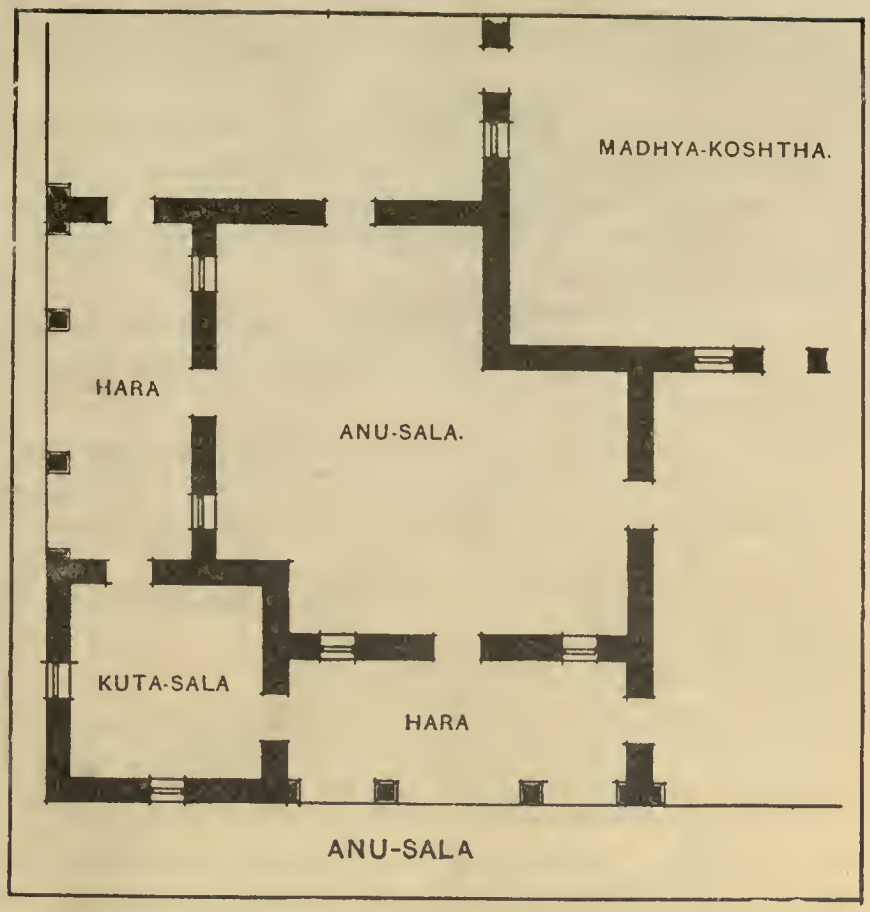
(*M.*, XIV, 59–60.)

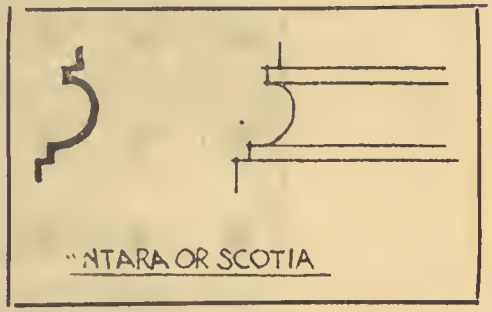
ANTARĀLA(KA)—The intermediate space, the interior (=antarālaya), corridor.—(*M.*, XXIII, 39.)

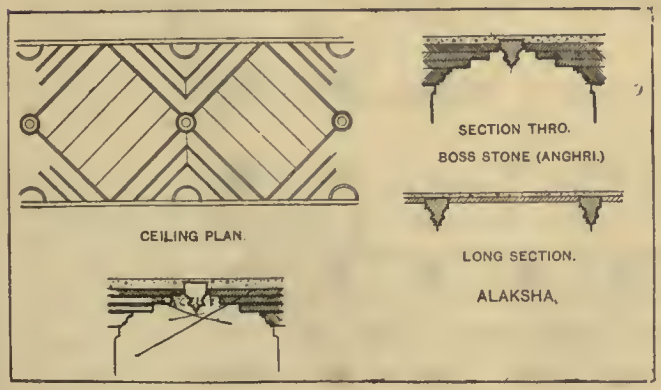
(1) Intercolumnation :

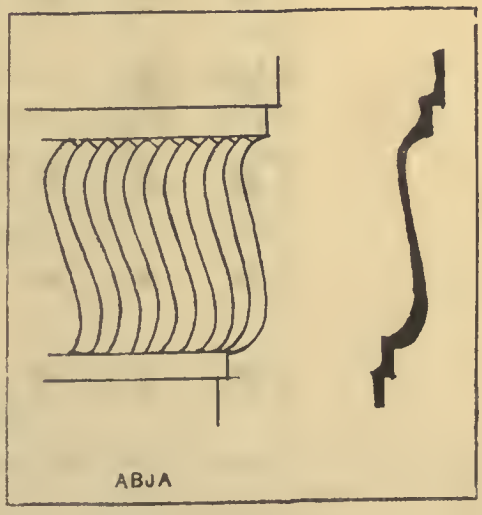
Mūla-pāda-viśālaṁ vā tāt-tri-pāda-viśālakaṁ ।
Etat kumbhāṅghrikaṁ proktam antarālaṁ cha yojayet ।

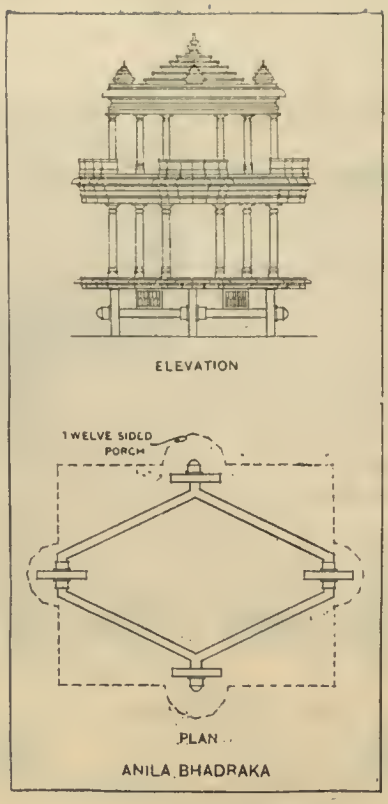
(*M.*, XV, 231–232.)

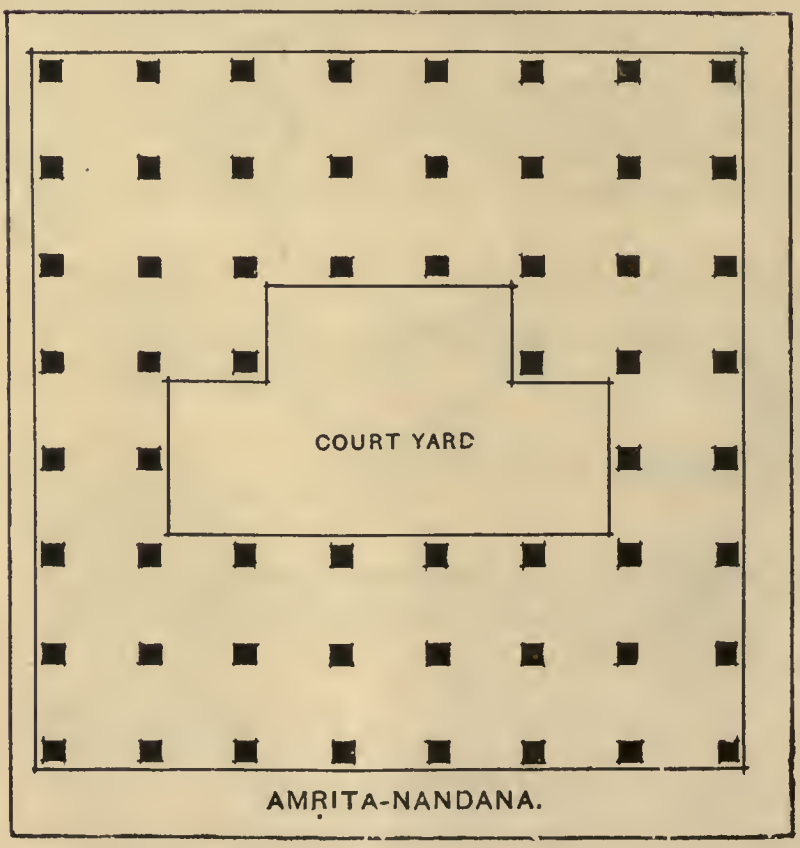

MADHYA-KOSHTHA.
HARA
ANU-SALA.
KUTA-SALA
HARA
ANU-SALA


NTARA OR SCOTIA


CEILING PLAN.
SECTION THRO.
BOSS STONE (ANGHRI.)
LONG SECTION.
ALAKSHA.


ABJA


ELEVATION
TWELVE SIDED PORCH
PLAN
ANILA BHADRAKA


COURT YARD
AMRITA-NANDANA.

(2) Referring to corrider of the fifth storey :

Tasmāt tri-mūla-harmyāntaṁ tad-dvayor mūla-deśake ।
Antarālaṁ prakurvīta pārśve sopāna-saṁyutam ।
Sarva-pradakshiṇaṁ kuryād yuktyā dvāraṁ prakalpayet ।

(*M.*, XXIII, 20–22, *see also* 23–39.)

(3) Interior parts of a building :

Gopurair maṇḍapādyaiś cha chāntarāle tvalindake ।

(*M.*, LXIX, 8, *see also* XXX, 60.)

(4) 'The second maṇḍapa of a temple, between the ardha-maṇḍpa and the shrine, J. B.'

Cf. Gorakshakaṁ bhairavam āñjaneyaṁ Sarasvatīm Siddhi-vināyakaṁ cha ।

Chakāra pañchāyatanāntarāle bālendu-mauli-sthita-manaso yaḥ ।

(Cintra praśasti of the reign of Sarangadeva, v. 45, *Ep. Indic.*, Vol. I, pp. 284, 276, note 15.)

(5) ' In the antarāla (or interior), they erected a most beautiful raṅga-mṇṭapa, and a fine chandra-śāla (or upper storey) according to the directions given by the King Timmendra.'—(*Ep. Carnat.*, Vol. XII, Pāvugaḍa Taluq, no. 46, pp. 122 ; Translation, line 14, 203, Roman Text, v. 9.)

(6) ' An antarāla or intermediate porch—(Fergusson, quoted by Rice *Ep. Carnat.*, Vol. V, Part I, Introduc., p. XXXIX, para. 2, line 6.)

(7) Antarāle yathā yuktyā maṇḍapākāram vinyaset ।—(*M.*, XXIII, 39.)

ANTARIKSHA—A quarter.

Jayante tat-pare saumye antarikshe'ka-pūrvake ।—(*M.*, VII, 39.)
Mṛige chaivāntarikshe vā bhṛiṅgarāja-mṛishe tathā ।—(*M.*, IX, 357.)

A synonym of the lupā or pent-roof :

Aṁbaraṁ cha vyayaṁ jyotir gaganaṁ cha vihāyasi ।
Anantaṁ cha antarikshaṁ cha pushkalaṁ chāshṭadhā lupāḥ ।

(*M.*, XVIII, 174–175.)

ANTARIKSHA-KĀNTA—A class of ten-storeyed buildings.

(*M.*, XXVIII, 14–15, *see* under PRĀSĀDA.)

ANTARITA—A fillet, a moulding of the pedestal, the base and also of the entablature. In base it is connected with another crowning moulding called ālińga and in pedestal with prati-vājana. In its office and situation it would resemble a fillet. Its synonyms are—vājana, kshepaṇa, vetra, paṭṭa, uttara, paṭṭikā, kampa, dṛikka, and maṇḍa, etc.—(*M.*, XVI, 46–47.)

A crowning moulding of the pedestal and the base :

(1) Tad-urdhve'ntaritaṁ chāṁśaṁ tat-samam prativājanam ।
Ekaṁ chāntaritaṁ chordhve sārdhāṁśaṁ prativājanam ।

(*M.*, XIII, 58, 69, etc.)

Āliṅgam aṁśakaṁ chaiva tat-samāntaritaṁ tathā ।
Āliṅgam aṁśakaṁ chordhve aṁśenāntaritaṁ tathā ।

(*M.*, XIV, 51, 101, etc.)

(2) The tenth moulding from the top of the entablature.—(*See Kāmik āgama*, LIV, 2, under PRĀSĀDA.)

(*See* Rām Rāz, *Ess. Arch. of Hind.*, p. 25·

ANTAR-JANMAN—An inner plinth.

Antarjanma bahirjanma nimnonnatayā sthitam ॥
Nirvaṁśameva tat sarvaṁ kartṛi-vaṁsaṁ bhaved dhruvam ।

(*M.*, LXIX, 16, 17.)

ANTARITA-MAṆḌAPA—The ante-chamber in front of a shrine.

(Chalukyan Architecture, *Arch. Surv.*, New. Imp. Series, Vol. XXI, p. 37.

ANTAR-BHITTI—An inner wall, partition wall, etc.

Tan-māne tu sālānāṁ vinā-bhittiṁ sabhittikaṁ ।
Antar-bhittis tu chaivaṁ syād bahir-bhittis tu sarvadā ॥

(*M.*, XL, 51, 52.

ANTAR-MAṆḌALA—The circular court in the interior of a com-) pound.

Antar-maṇḍalam ārabhya mahāmaryādikāntakam ।
Pañcha-kuṭ(d)yasya chotsedhaṁ pratyekaṁ pañchadhā bhavet ।

(*M.*, XXXI, 57-58.)

ANTAR-MUKHA—Literally, with face towards the inside.

Cf. Gṛiha-garbhaṁ (=foundations) antar-mukham syād grāma-garbhaṁ bahir-mukhan ।—(*M.*, XII, 216.)

ANTAR-VAPRA—The internal rampart, the internal side of the rampart.

Cf. Antar-vapraṁ bahir-bhittiś cheshṭaṁ dīrghaṁ cha chūlikā ।

(*M.*, IX, 362.)

ANTAR-VĪTHĪ—Internal roads, lanes, in a village or town.

Antar-vīthī chaika-pakshā bāhya-vīthī dvi-pakshakā ।—(*M.*, IX, 396.)

ANTAḤ-PURA—The female apartments.

(1) *Rāmāyaṇa* (Cock) :

II. 3, 13 : Antaḥ-purasya dvārāṇi sarvasya nagarasya cha ।

II. 14, 29 : Dadarśāntaḥ-puraṁ śrīmān nānā-dhvaja-gaṇāyutam ।

II. 14, 66 : Nirjagāma . . . sāgara-hrada-saṁkāśāt sumantro'ntaḥ-purāch chhubhāt ।

II. 15, 18 : Ityuktvāntaḥpura-dvāram ājagāma purāṇavit ।

V. 4, 30 : Sa hema-jāmbu-nada-chakravālaṁ mahārha-muktāmaṇi bhūshitāntam ।
Parārghya-kālāguru-chandanārhaṁ sa Rāvaṇāntaḥpuraṁ praviveśa ॥

II. 15, 47 : Saṁriddham antaḥpuram āviveśa ha ॥
Tatodri'-kūṭa-chala-megha-sannibhaṁ mahāvimānopama-veśma-saṁyutam ।

VII. 42, 27 : Pūrvāhṇe dharma-kāryāṇi kṛitvā dharmeṇa dharmavit ।
Śeshaṁ divasa-bhāgārdham antaḥpura-gato bhavet ॥

Compare also II, 10, 11–17 ; 70, 20 ; II, 70, 27 ; II, 114, 29 ; III, 54, 13 ; IV, 26, 22 ; V, 4, 24.

(2) *Pañchatantra*, ed. Bombay, I, pp. 38, 58, 61, 168 :

Gatvā kanyāntaḥpure . . . rāja-kanyām . . . sapta-bhūmi-kaprāsāda prānta-gatām . . . bhaja ॥
Iha rājñas tu tanayā Pāṭalītyasti kanyakā ।
Uparyantaḥ-pure śā cha ratnam ityabhirakshyate ॥
Praviśya so'driśṛiṅgāgra-tuṅga-vātāyanena tām ।
Antaḥpure dadarśātha suptāṁ rahasi Pāṭalīm ॥
Pravrājakāś cha gatvaiva vātāyana-pathena saḥ ।
Praviśyāntaḥ-puraṁ prāpa suptāṁ niśi nṛipātmajām ॥

(3) ' When the great minister, Verggaḍe of the female apartments (antaḥpura), great master of robes ' . . .—(*Ep. Carnat.*, Vol. VII, Shikarpur Taluq. no. 144, Transl., p. 107 ; Roman text, p. 191.)

ANTAḤ-HĀRĀ—The second inner court, internal enclosure in a temple or house, the whole compound being divided into five courts or enclosures.—(*M.*, XXXI, 11–14.)

(*See* under PRĀKĀRA.)

ANTAḤ-ŚĀLĀ—Inner rooms, internal portions of a mansion.

Antaḥ-śālā yathā-dvāraṁ daṇḍakasyoktavat kuru ।—(*M.*, XXXV, 281.)

ANTAḤ-SĀLĀ—Inner wall, internal partition.

Antaḥ-sālam-iti prāktaṁ bāhya-sālam-ihochyate ।

(*M.*, XL, 114, *see also* XXXVI, 79 ; XL, 44.)

ANTIKA—A class of the two-storeyed buildings.

(*M.*, xx, 94, 26–27, *see* under Prāsāda.)

ANTIMA—Limit, boundary, pilaster terminating the side-wall of a temple, and having base and capital generally differing from those of adjacent columns, same as prastara (entablature or plinth).

Tad (=prati)-ūrdhve sārdha-pañchāṁsaṁ pādāyāmaṁ tṛitīyakam ।
Antimaṁ cha dvi-bhāgaṁ syād vedikodayam īritam ।

(*M.*, xxxiii, 226-227.)

ANYA-RAṄGA—The second court or theatre of a compound.

Maṇḍapaṁ nava-talaṁ kuryād bhavanam anya-raṅgaṁ vādhimaṇḍāpakāram ।—(*M.*, xi, 144.)

ANVANTA—A synonym of mañcha or a raised platform or couch.

(*M.*, xvi, 43, *see* under Mañcha.)

APACHCHHĀYĀ—A light shadow.

(*See* Avachchhāyā.)

APASAṀCHITA—A class of buildings in which the width (at the bottom) is the standard of measurement ; the temples in which the principal idol is in the recumbent posture.

Pratyekaṁ tri-vidhaṁ proktaṁ saṁchitaṁ chāpy-asaṁchitam upa-(apa)-saṁchitamityeva । (*Kāmikāgama*, xlv, 6–7.)
Utsedhe mānaṁ gṛihyaṁ chet sthānakaṁ tat prakathyate ।
Vistāre mānaṁ saṁkalpya chāsanaṁ tad udīritam ।
Pariṇāhe pāde vāpi mānaṁ śayanam īritam ।
Āsanaṁ saṁchitaṁ proktaṁ sthānakaṁ syād asaṁchitam ।
Apasaṁchitaṁ śayanaṁ chet tat tat tri-vidha-harmyake ।

(*M.*, xix, 7–11.)

Saṁchitāsaṁchitānāṁ cha aṁśair āyādibhir yutam ।
Apasaṁchita-harmyāṇāṁ tithyantaṁ shaḍ grahīshyate ।

(*M.*, xxx, 173–174.)

APOHA (*see* Ūha)—An additional or unprescribed member attached to a structure.

ABJA (*see* Padma)—A lotus, the cyma or ‘ a moulding taking its name from its contour resembling that of a wave, being hollow in its upper part and swelling below. Of this moulding there are two sorts, the cyma recta, just described ; and the cyma reversa

wherein the upper part swells, whilst the lower is hollow. By the workmen these are called " ogées."

Compare the lists of mouldings given under ADHISHṬHĀNA and UPAPĪṬHA.

ABJA-KĀNTA—A class of the ten-storeyed buildings.

(*M.*, XXVIII, 18, *see* under PRĀSĀDA.)

ABHAYA—Fearless, a refuge-offering pose of the hand of an image.

Chatur-bhujaṁ tri-netraṁ cha jaṭā-mukuṭa-bhūshitam ।
Varadābhaya-saṁyuktaṁ kṛishṇa-paraśu-dhāriṇam ।

(*M.*, XII, 120-121.)

Abhayaṁ dakshiṇe . . .—(*M.*, VII, 159.)
Purve cha tvabhayam . . .—(*ibid.*, 166.)
Varadaṁ chābhayaṁ pūrve vāme tu dvāra-hastakam ।

(*M.*, LIV, 154.)

ABHAYA-HASTA (*see* ABHAYA)—With hand in the pose of offering refuge.

Varadābhaya-hastaṁ cha jaṭā-mukuṭa-maṇḍitam ।—(*M.*, LI, 30.)

ABHISHEKA-MAṆḌAPA (*see* MAṆḌAPA)—The coronation hall.

Nṛipāṇam abhishekārthaṁ maṇḍapam ।—(*M.*, XXXIV, 38.)

See Inscrip. of Rajaraja III (no. 39, *H.S.I.I.*, Vol. III, p. 86) under MAṆḌAPA.

ABHYAVAHĀRA-MAṆḌAPA—A dining-hall.

See Raṅganātha inscript. of Sundarapandya (v. 23, *Ep. Ind.*, Vol. III, pp. 13, 16) under MAṆḌAPA.

AMALAŚILĀ—The crowning part of the (Hindu) śikhara.

(Fergussion, *History of Indian and Eastern Architecture*, p. 323, note; II, p. 129.)

AMALASĀRA (*see* ĀMALAKA)—The flat scolloped cushion or cog-wheel member surmounting the śikhara (dome or tower).

(Cousens: *Somanath and other Medieval Temples in Kathiavad*, pp. 41, 45, 17.)

AMṚITA-NANDANA—A pavilion with 58 pillars.

(*Matsya-Purāṇa*, Chap. CCLXX, v. 8, *see* under MAṆḌAPA.)

AMBARA—The sky, one of the eight kinds of the lupā or pent-roof.

(*M.*, XVIII, 174-175, *see* under ANANTA.)

Cf. Lupākārādi jaḍānāṁ mānayen mānavit-tamaḥ ।
Ambarādyashṭadhāmāni niḍānāṁ lupamānayet ।—(*M.*, XVIII, 329-330.)

AMBUJA—Lotus, the cyma (*see* ABJA and PADMA).

Cf. Tad-dvayaṁ chāmbujaṁ chordhve kapotochchaṁ guṇāṁśaka ।

(*M.*, XIII, 57.)

(A)RAṄGA—A synonym of harmya (building).

Araṅgam iti chaitāni harmyam uktaṁ purātanaiḥ ।—(*M.*, III, 8.)

ARATNI (*see* under AṄGULA)—A measure.

(1) A cubit of 24 aṅgulas (Introduct., *Rājavallabha Maṇḍana and Brahmāṇḍana-Purāna*, I, VII, 99; *see* under AṄGULA).

A measure equal to the length of the forearms with the fingers fully stretched (*Suprabhedāgama*, XXX, 24, *see* under AṄGULA).

(2) A measure equal to the first with fully stretched fingers (*Suprabhedāgama*, XXX, 24, *see* under ANGULA).

According to this *Āgama* (*ibid.*, v. 25) and the *Mānasāra* (II, 49) a measure of 24 aṅgulas is called kishku (hasta).

'This word (aratni), which primarily means "elbow," occurs frequently from the *Ṛig-Veda* onwards. (*R.-V.*, VIII, 80, 8; *A.-V.*, XIX, 57, 6; *Aitareya Brāhmaṇa*, VIII, 5; *Śatapatha-Brāhmaṇa*, VI, 3, 1, 33, etc.) as denoting a measure of length (ell or cubit), the distance from the elbow to the tip of the hand. The exact length nowhere appears from the early texts.' (Macdonell and Keith, *Vedic Index*, I, 34.)

Śatapatha-Brāhmaṇa also VII, 1, 2, 6.

Kauśika-Sūtra, 85 (*Pet. Dict.*) : Bāhur vā aratniḥ ।

ARKA-KĀNTA—A class of the eleven-storeyed buildings.

Evaṁ tu vajra-kāntaṁ syād arka-kāntam ihocyhate ।
Tad eva śālā-prānte tu pārśve chaikena saushṭikam ।
Tad-dvayor antare deśe tat-samaṁ kshudra-hārayoḥ ।
Pūrvavat kūṭa-vistāraṁ śeshaṁ hārāṁśa-pañjaram ।
Tan-madhye tu tri-bhāgena kshudra-śālā-viśālataḥ(tā) ।
Tat-pārśve tri-tri-bhāgena hāra-madhye sa-bhadrakam ।
Kshudra-śālā-tri-bhāgena madhya-bhadraṁ samanvitam ।
Kshudra-hārā cha sarveshāṁ nāsikā-pañjarānvitam ।
Madhye madhye mahānāsī netra-śālā cha pārśvayoḥ ।
Sarvālāṅkāra-saṁyuktaṁ shaḍ-vidhaṁ (ekādaśa-talaṁ) parikīrtitam ।

(*M.*, XXIX, 25-34.)

ARGALA—A bolt or pin for fastening a door.

Argalaṁ dakshiṇe bhāge vāma-bhāge tu talpakam ॥
Kavāṭa-yugmaṁ kartavyaṁ kokilārgala-saṁyutam ॥

(*Kāmikāgama*, LV, 49, 52.)

A moulding of the base (*see Kakshabandha*, under ADHISHṬHĀNA).

Kampam ekaṁ tad-ūrdhve cha ekenārgalam eva cha ।

(*M.*, XIV, 331, note.)

ARDHA-CHITRA (*see* ĀBHĀSA)—An image made in half or middle relief.

Ardhāṅga-dṛiśyamānaṁ cha tad ardha-chitram iti smṛitam ।

(*M.*, LI, 10.)

Chitrāṅgam ardha-chitrāṅgam ābhāsāṅgaṁ tridhochyate ।

(*M.*, LI, 8.)

Sthāvaraṁ jaṅgaṁ vapi dāru-śailaṁ cha lohajam ।
Chitraṁ vā chārdha-chitraṁ cha chitrābhāsam athāpi vā ।

(*M.*, LVI, 14–15.)

ARDHA-NĀRĪŚVARA—A name of Śiva, an image the right half of which is the representation of Śiva and the left half of his consort Durgā.

Paśchima-mūla-tale madhye koshṭhe liṅgam adbhutam ।
Athavārdha-nārīśvara(ṁ) sthānakam ।—(*M.*, XIX, 224–225.)

ARDHA-PRĀṆA (*see* SANDHI-KARMAN)—A kind of joinery resembling the shape of the bisected heart.

Sarveshām api dārūṇāṁ sandheḥ prānte tu yojayet ।
Yatheshṭaṁ phaṇa(m)-saṁgrāhyaṁ chodayed vistarāntakam ।
Mūlāgre kīlakaṁ yuktam ardha-prāṇam iti smṛitam ।
Tad eva dvi-lalāṭe cha vistārārdhārdha-chandravat ।
Madhye cha danta-saṁyuktam agra-mūle tu yojayet ।
Śeshaṁ tu pūrvavat kuryāt mahāvṛitam iti smṛitam ।

(*M.*, XVII, 97–102.)

ARDHA-MAṆḌAPA—A half-pavilion, a vestibule, a court, a porch.

(1) Idam āyādikaṁ chārdha-maṇḍape śishṭa-maṇḍape ॥

(*Kāmikāgama*, L, 68.)

Ardha-maṇḍapa-dakshāṁśe vighneśa-nṛitta-rūpiṇam ।

(*ibid.*, LV, 73.)

(2) 'On the west wall of the ardha-maṇḍapa in front of the rock-cut Jambukeśvara shrine at Tiruvellarai.'—(Inscription no. XII, *Ind. Ant.*, Vol. XXXIV, p. 268.)

(3) The 'court in a temple next to the sacred shrine.' Winslow, *Tamil Dictionary* (*loc. cit.*).

(4) 'Ardha-maṇḍapa : the enclosed building in front of a shrine.'

(*Chalukyam Architecture*, Rea, *Arch. Surv.*, New. Imp. Series, Vol. xxi, p. 37.)

The detached building, sometimes open and sometimes enclosed, in front of a shrine, is generally called the mukhamaṇḍapa (the pavilion in front of the shrine).

(5) The ardha-maṇḍapa is 'a narrow passage or vestibule connecting' the garbha-gṛiha and mukha-maṇḍapa, and 'is open on two sides to permit the priestly worshipper circumambulating the central shrine.'

(H. Krishna Śastri, *South Indian Images of Gods and Goddesses*, p. 2. For this reference I am indebted to Prof. R. W. Frazer.)

ARDHA-ŚĀLĀ—A half-hall, an antechamber with one or more closed sides.

Ardha-śālā viśesho'sti chordhva-śālā-śamanvitam ।
Madhya-koshṭhaṁ dvi-pārśve tu chārdha-śālā-samanvitam ।

(*M.*, xx, 67, 73.)

Netra-śālārdha-śālā cha bhadra-śālādi-bhūshitam ।—(*M.*, xxvi, 67.)
Bhadra-śālā mahā-nāsī chārdha-śālādhyalaṅkṛitam ।—(*M.*, xxv, 34.)

ARDHA-HĀRA—A half chain of 64 strings, an ornament, a string of pearls worn round the neck.

Nakshatra-mālām api chārdha-hāram ।
Suvarṇa-sūtraṁ paritaḥ stanābhyām ।—(*M.*, l, 297-298.)

Cf. Bṛihat-Saṁhitā, lxxxii, 32.

ALAKSHA—A member of the entablature, some screen-work with small (invisible) apertures.

Etat tu sarvato-bhadram alakshākṛitir ihochyate ।
Tad eva karṇavaśād vaṁśaṁ prastīryāt tu sarvaśaḥ ।
Uttaraiḥ prāg-uktāṅghriḥ syāt tad-vaśāt parito nyaset ।
Tad evāntam alakshaṁ cha karṇayoś chottaraṁ vinā ।

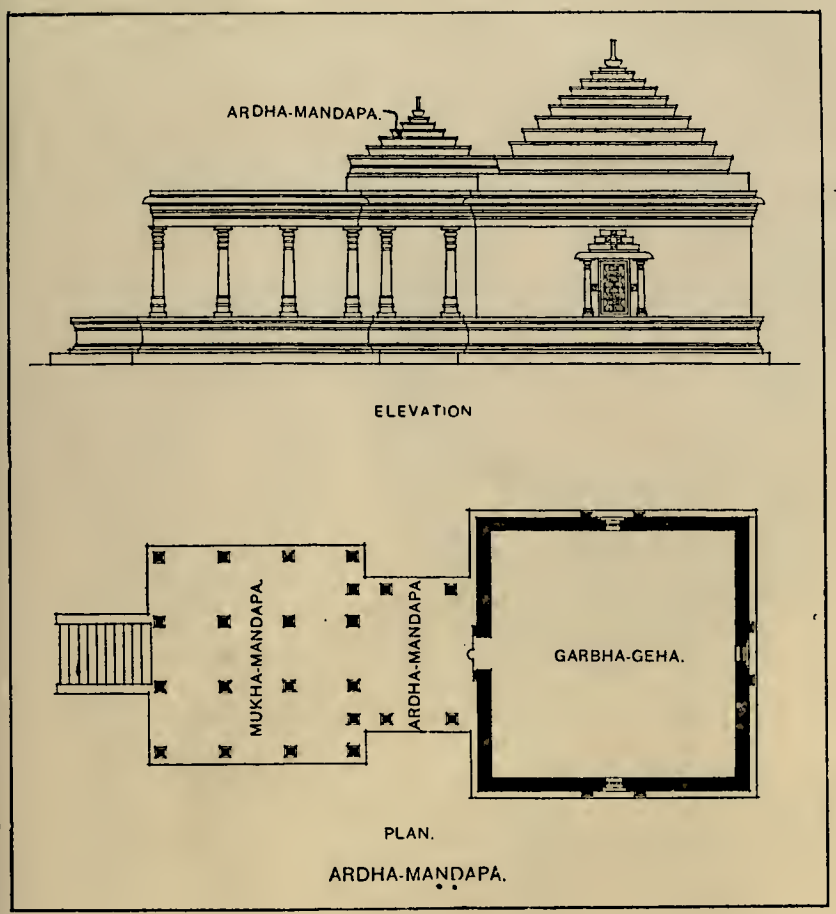
(*M.*, xvi, 185-188.)

ALAṄKĀRA-MAṆḌAPA—The dressing room, an attached hall or detached pavilion of a temple where the idols are dressed.

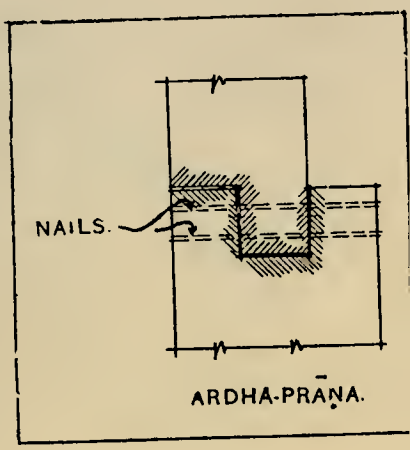
(*H. S. I. I.*, Vol. i, p. 127, first para., *see* under Maṇḍapa.)

ALINDA(KA)—A corridor, a terrace, a balcony, a gallery.

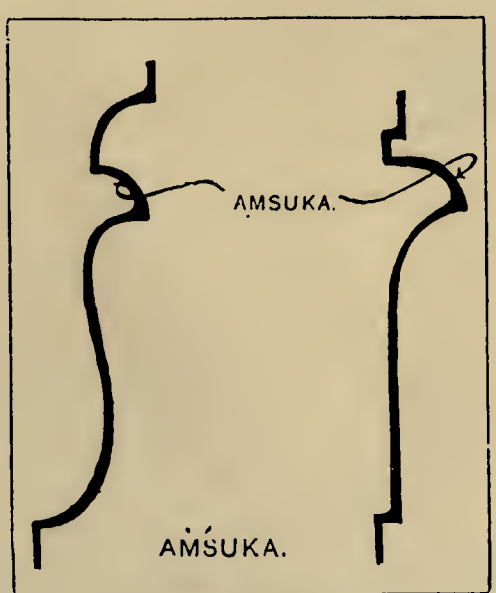
(1) 'Alinda-śabdena śālā-bhitter bāhye yā gamanikā jālakāvritāṅgaṇa-sammukhā kriyante' (commentary on *Bṛihat-Saṁhitā* or *Kiraṇa-tantra*, *see*



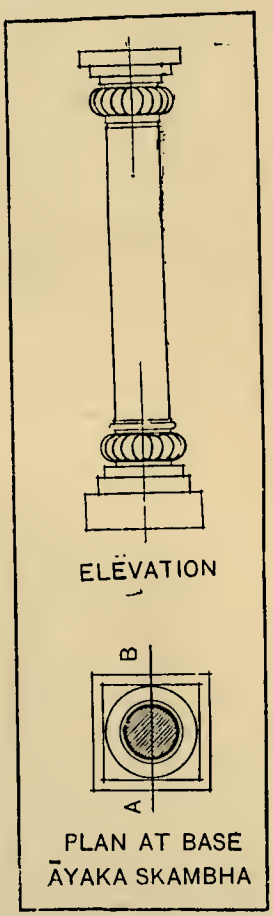
ARDHA-MANDAPA.



ARDHA-PRĀṆA.



AMŚUKA.



ĀYAKA SKAMBHA

below). By the word 'alinda' is understood the lattice-covered path beyond the wall of a hall and facing (or in front of) the courtyard. *Cf. Amarakōsha* (2, 2, 12).

(2) Senāpati-nṛipatīnāṁ saptati-sahite dvidhā-kṛite vyāse ।
Śālā-chatur-daśa-hṛite pañcha-triṁśad-vṛite '(a)lindaḥ ॥

'Add the number of 70 to those for the breadth of the mansions of the King and the Commander-in-Chief.'

The same is more plainly expressed in *Viśvak* :

'Write down the sum at two places. Divide it, in one place, by 14; this gives the measure for a hall. Divide the sum by 35; the quotation is the measure of the terrace.'

Pramitaṁ tveka-śālaṁ tu śubhadaṁ tat prakīrtitam ।
Senāpāti-nṛipādīnāṁ saptatyā sahite kṛite ॥
Vyāse chaturdaśa-hṛite śālā-mānaṁ vinirdiśet ।
Pañcha-triṁśad-hṛite'nyatrālinda-mānaṁ bhavech cha tat ॥

'The word might as well be rendered by balcony, gallery.'

(Kern, *Bṛihat-Saṁhitā*, LIII, 17; *J.R.A.S.*, N. S., Vol. VI, p. 282, note 3.)

Apratishiddhālindaṁ samantato vāstu sarvato-bhadraṁ ।

'An edifice with uninterrupted terraces on every side is termed Sarvato-bhadra.'

Nandyāvartam alindaiḥ śālā-kuḍyāt pradakshiṇāntargataiḥ ।

'Nandyāvarta is the name of a building with terraces that form the wall of the room extending to the extremity in a direction from east to south (alias from left to right).'

'The Vardhamāna has a terrace before the (chief) entrance, extending to the end; then, when you proceed in a direction from left to right, another beautiful terrace, and there on, again, another in the aforesaid direction.'

'The Svastika (house) is auspicious, if it has the terrace on the east side, and one continual terrace along the west side, at the ends whereof begin two other terraces going from west to east, while between the extremities of the latter lies a fourth terrace.'

'The Ruchaka (house) has a western and eastern terrace running to the end, and between their extremities two others.'—(*Ibid.*, vv. 31–35, pp. 285–286.)

(3) *Agni-Purāṇa*, Chap. CVI, vv. 20–24 :

Chatuḥ-śālaṁ tri-śālaṁ vā dvi-śālaṁ chaika-śālakam ।
Chatuḥ-śāla-gṛihāṇāṁ tu śālālindaka-bhedataḥ ॥

Śata-dvayaṁ tu jayante pañchāśat-pañcha teshvapi ।
Tri-śālāni tu chatvāri dvi-śālāni tu pañchadhā ॥
Eka-śālāni chatvāri ekālindāni vachmi cha ।
Ashṭā-viṁśad-alindāni gṛihāṇi nagarāṇi cha ॥
Chaturbhiḥ saptabhiś chaiva pañcha-pañchāśad eva tu ।
Shaḍ-alindāni viṁśaiva ashṭābhir viṁśa eva hi ॥
Ashṭālindaṁ bhaved evaṁ nagarādau gṛihāṇi hi ।

(4) *Kāmikāgama*, XXXV :

Āsām (=śālānām) agre tu alindā(ḥ) syuḥ pradhāne vā viśeshataḥ ।
Eka-dvi-tri-chatush-pañcha-shaṭ-saptālinda-saṁyutaḥ ॥ (37)
Pṛishṭhe pārśve tathaiva syuḥ ishṭa-deśe'thavā punaḥ ।
Pṛithu-dvāraś cha dvārāṁś cha evam eva prakalpayet ॥ (38)
Alinḍaḥ pṛithu-dvāreṇa samo vā chārdha-mānataḥ ॥ (44)
Alinde dvāram evaṁ syād anyatrāpy-evam eva tu ॥ (49)
Alindasya samantāt tu bhāgenaikena-vārakam ॥ (77)

See also ibid., L, 74, 75, 87.

Ibid., LV, 201 (the synonyms of alinda).

. . . āndhāraṁ gṛiham ādyakam ।
Parimaṇḍaṇa(ṁ) sālinḍa vā alindasyābhidānakam ॥

(5) Chāntarāle tvalindake ।—(*M.*, LXIX, 8.)
Urdhvordhva-talānaṁ tu chaika-bhāgenālindakam ।
(*M.*, XXIV, 45, etc.)

(6) *See* the views of the corridors (Pallaba Architecture, *Arch. Surv.*, New. Imp. Series, Vol. XXXIV, plates VI, VII, VIII, IX.)

ALPA—A class of buildings.—(*Kāmikāgama*, XLV, 53–54, *see* under MĀLIKĀ.)

ALPA-NĀSIKA (*see* NĀSĀ)—A small nose, a small vestibule.

Chatur-dikshu chatur-dvāraṁ chatuḥ-shashṭy-alpa-nāsikam ।
(*M.*, XXXIV, 106.)

AVACHCHHĀYĀ—A dim light, shadowless spot, a light shadow.

Kanyā-vṛishabha-māsau cha-avachchhāyā na vidyate ।
Meshe cha mithune chaiva tulā-siṁha-chatushṭaye ।
Evaṁ hi dvyaṅgulaṁ nyastaṁ vṛiśchikāshāḍha-minayoḥ ।
Chatur-aṅgulaṁ prakartavyaṁ dhanuḥ-kumbhau shaḍ aṅgulam ।
Makare'shṭāṅgulaṁ proktam apachchhāyāṁ viśeshataḥ ।
(*M.*, VI, 31–35.)

Cf. Vitruvius, Book IX, Chap. VIII, under ŚAṄKU.

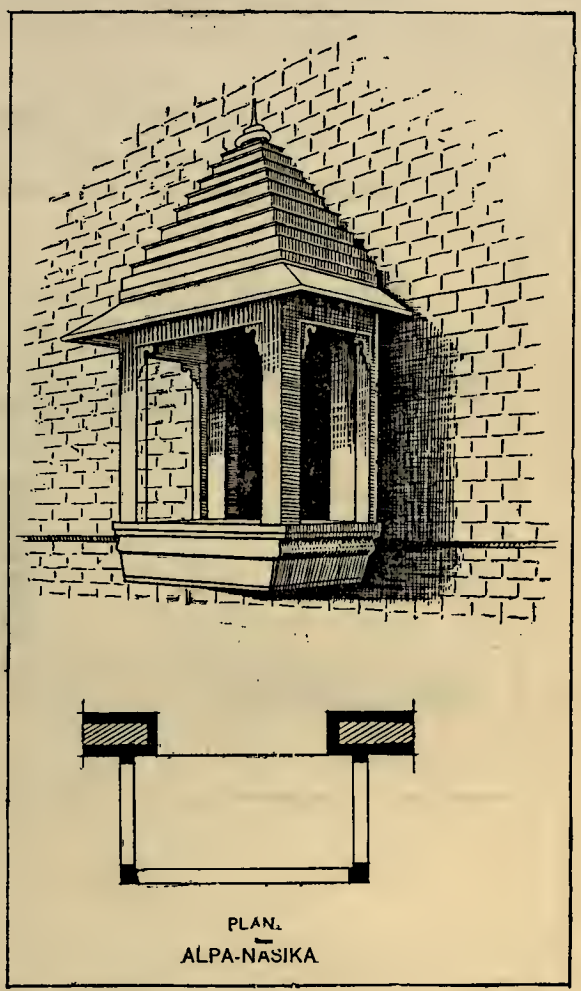
AVALAMBANA—A pendant.

Bāhu-valaya-dāma cha skandha-mālāvalambanam ।—(*M.*, L, 15.)

AVASATHA (*see* PRATIŚRAYA) the rest-house, a house.

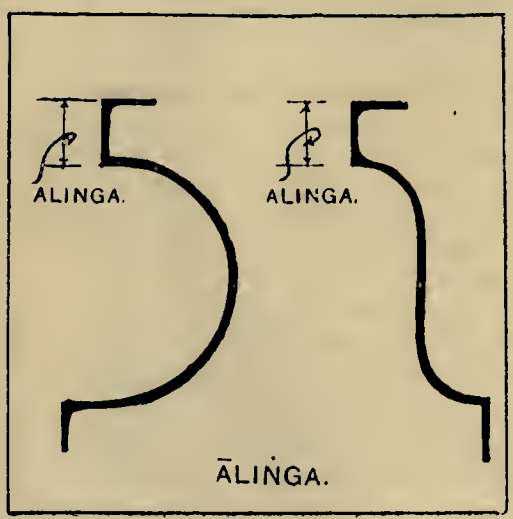
Ramyāmavasathaṁ chaiva datvāmuṁ lokamāśritaḥ ।
'Having given away a charming house, he attained the other world.'—(*Hemadri*, p. 646.)

ABHANGA

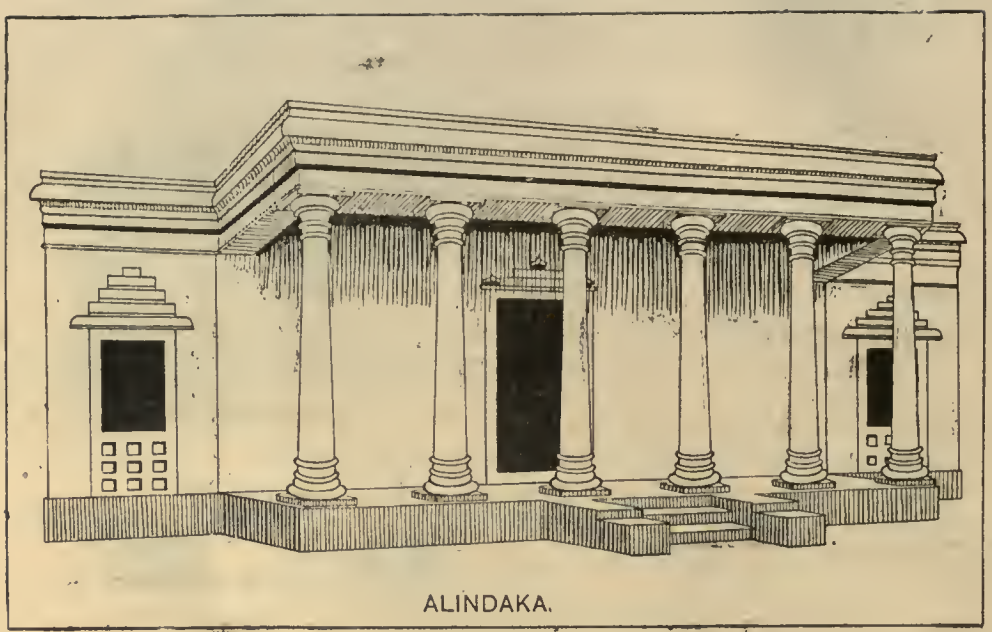


PLAN.

ALPA-NASIKA



ALINGA.



ALINDAKA.

Ramyāṁś chāvasathān datvā dvijebhyo divam āgataḥ ।

'Having given away charming houses to the twice-born and gone to heaven.' (*Mbh. Anuśāsanika-parvan*, Chap. CXXXVII, v. 10).

(*Ind. Ant.*, Vol. XII, p. 142, c. 1-2.)

AVASĀNA (*see* MAÑCHA)—A synonym of the mañcha or a raised platform.—(*M.* XVI, 43.)

AŚVATTHA-VṚIKSHA—The holy fig-tree, carved along with Buddha images.

Referring to the Bauddha images :

Sthānākaṁ chāsanaṁ vāpi siṁhāsanādi-saṁyutam ।
Aśvattha-vṛiksha-saṁyuktaṁ kalpa-vṛikshaṁ tathā nyaset ।

(*M.*, LVI, 3-4.)

ASHṬA-TALA—The eighth storey.

(*Mānasāra*, XXVI, 1-76, *see* under PRĀSĀDA.)

A description of the seventh floor including the proportion and ornaments of the component parts (*lit.* limbs) from the plinth to the tower :

Evaṁ śreshṭhaṁ tvashṭa-tale sarvālaṅkāra-saṁyutam ।
Janmādi-stūpi-paryantaṁ chāṅga-mānam ihochyate ।
Saikāshṭa-pañchakāṁśa-harmye tuṅgaṁ vibhājite ।
Ādhāraṁ chāshṭa-bhāgena vedāṁśaṁ charaṇāyatam ।
Tad-ardhaṁ valabhyutsedhaṁ sārdhaṁ vahnyaṁśam aṅghrikam ।
Sa-tri-pādāṁśakaṁ mañcham ūrdhve pādaṁ guṇāṁśakam ।
Tad-ardhaṁ chordhva-mañchaṁ syāt tri-pādākshāṅghri-tuṅgakam ।
Sa-pādāṁśaṁ prastarottuṅgaṁ dvyardhāṁśaṁ charaṇāyatam ।
Tad-ardhaṁ prastarotsedhaṁ jaṅghāyāmaṁ cha sārdhakam ।
Prastaraṁ chaika-bhāgena dvyaṁśa-pādādhikāṅghrikam ।
Urdhva-mañchaṁ tri-pādaṁ syāt sa-bhāgaṁ pāda-tuṅgakam ।
Ekāṁśaṁ prastarotsedhaṁ tad-ūrdhve cha tri-bhāgikam ।
Tat-tri-bhāgaika(ā) vediṁ(ḥ) syād dvi-bhāgaṁ gala-tuṅgakam ।
Sa-pādaṁ chāṁśakaṁ chordhve śiraḥ-śeshaṁ śikhodayam ।
Kechit tad eva tuṅge tu sapta-bhāgādhikaṁ tathā ।
Urdhvordhva-pāda-mūle tu yuktyāṁśena masūrakam ।
Talānāṁ chaika-bhāgena karṇa-harmyāvṛitaṁ nyaset ।
Antara(ṁ) prastaropetaṁ sarvālaṅkāra-saṁyutam ।
Tasyāntasyaika-bhāgena kuryād āvartyālindakam ।
Mūle bhāge pādāṁśena chordhve'rdha-talāṁśakam ।
Netra-śālārdha-śālā cha bhadra-śālādi-bhūshitam ।
Toraṇair nīḍa-śālādi nāsikābhir alaṅkṛitam ।
Koshṭ(h)e śālādi-madhye cha chordhva-śālā cha maṇḍitam ।
Nāsikā-pañjara-śālā kūṭa-koshṭhe tu bhūshitam ।
Nāsikā-pañjarādyasya bhadra-śālyair alaṅkṛitam ।
Kshudra-śālā-pradeśe tu sarvālaṅkāra-saṁyutam ।

Karṇa-kūṭāṅga-madhye tu nāsikā-pañjarānvitam ।
Sarvāṅgaṁ kshudra-nāsyaṅgaṁ prastarālaṅkṛiti-kṛiyā ।
Nānādhishṭhāna-saṁyuktaṁ nānā-pādair alaṅkṛitam ।
Nāgara-drāviḍādīnāṁ vesarādīn śikhānvitam ।
Sarvālaṅkāra-saṁyuktaṁ pūrvavat parikalpayet ।

(*M.*, XXVI, 47-76.)

ASHṬA-TĀLA (*see* under TĀLA-MĀNA)—A kind of sculptural measurement in which the whole height of an idol is generally eight times the face.

ASHṬA-TRIṀŚAT-KALĀ—Thirty-eight kinds of mystic marks on the body of an image.

Pādādi-mūrdha-paryanta(ṁ) paryāyādi-chāksharaṁ nyaset ।
Ashṭa-triṁśat-kalāḥ sarvās tat-tad aṅgāni vinyaset ।

(*M.*, LXX, 90-91.

ASHṬA-VARGA—The eight component parts of a single-storeyed building, namely, adhishṭhāna (basement), aṅghri (dwarf pillar), prastara (entablature), grīva (a platform or neck), śikhara (tower) stūpi (dome), grīva-mañcha (a projecting seat at the neck) and vedikā (a raised platform).—(*M.*, XIX, 80-85.)

ASHṬĀŚ(S)RA—Eight-cornered, a kind of single-storeyed building which is octangular in plan and has one cupola.

(1) *Bṛihat-Saṁhitā*, LVI, 28, Kāśyapa, *J.R.A.S.*, N. S., Vol. VI, p. 320, note 1 (*see* under PRĀSĀDA).

(2) *Matsya-Purāṇa*, Chap. CCLXIX, VV. 29, 53 (*see* under PRĀSĀDA).

(3) *Bhavishya-Purāṇa*, Chap. CXXX, V. 25 (*see* under PRĀSĀDA).

ASAṀCHITA—A class of buildings in which the height is the standard of measurement, the temples in which the main idol is in the erect posture.—(*M.*, XIX, 7-11 ; XXX, 173-174, *see* under APASAṀCHITA.)

Pratyekaṁ tri-vidhaṁ proktaṁ saṁchitaṁ chāpyasaṁchitam upasaṁchitaṁ ityevam ।—(*Kāmikāgama*, XLV, 6-7.)

AṀŚA (*see* SHADVARGA). A part, one of the six varga formulas for ascertaining the right proportion.

AṀŚARU—The rim, the edge.

Cf. Darpaṇaṁ suvṛittaṁ syād aṁśaru kiṁchid unnatam ।

(*M.*, L, 117.)

AṀŚUKA—A moulding of the pedestal, generally placed between a cyma and a corona (kapota).—(*M.*, XV, 122, *see* under UPAPĪṬHA.)

Ā

ĀCHĀRYA-KULA—Residences of professors, sufficiently comfortable even for princes and ordinary male and female pupils to be in residence for instruction, teachers' family establishment with pupils' quarters in separate blocks. These might have supplied the general plan of the later monastic establishments of Buddhists, Jains, Brahmans, comprising a quadrangular structure with cells on all sides and the shrine and abbot's cell in the centre or the east. 'These may be looked upon as the beginnings out of which the pre-Buddhistic and Buddhistic centres of learning like in Nalanda of the residential university type were evolved.'—(Sarkar, *Social History of India*, p. 13.)

ĀGAMA—The scriptures, different from the Āgama treatises of Southern India some of which are predominently architectural texts.

Cf. M., XLIX, 176.

ĀGĀRA—A house, a room, a cell.

For synonyms, *see Amarakōsha* (II, 2, 5).

Cf. (1) *Rāmāyaṇa* (Cock) :

V. 3, 18 : Koshṭhāgārāvataṁśikām . . . nagarīm ।
II. 3, 44 : Koshṭhāgāra-yudhāgāraih kṛitvā saṁnichayān bahūn ।
VI. 127, 56 : Aneka-śataṁ bhavān kośaṁ koshṭhāgāraṁ gṛihaṁ balam ।

(2) *Mahābhārata* (Cock) :

XII. 69, 54 : Bhāḍāgāra-yudhāgārān yodhāgārāṁś cha sarvaśaḥ ।
Aśvāgārān gajāgārān balādhikaraṇāni cha ।
XII. 86, 121 : Bhāṇḍāgāra-yudhāgārān prayatnenābhivardhayet ।
I. 134, 11 : Prekshāgāraṁ suvihitaṁ chakrus te tasya śilpinaḥ ।
Rājñaḥ sarvāyudhopetaṁ strīṇāṁ chaiva nara-shabha ॥
I. 134, 14 : Muktā-jāla-parikshiptaṁ vaidurya-maṇi-śobhitam ।
Śāta-kumbhamayaṁ divyaṁ prekshāgāram upāgatam ॥
IV. 23, 16 : Yad etan nartanāgāraṁ matsya-rājena kāritam ।
Divyā-atra kanyā nṛityanti rātrau yānti yathāgṛiham ॥

(3) *Mānasāra* (XXV, 29, etc.) :

Tale tale bhadra-koshṭhāśramāgāraṁ parikīrtitam ।

(4) Dharmma-śāstra-prachoditam yogi-(ā)gāram idaṁ proktaṁ suribhiḥ pariveshtiṭam ।

'Āgāra, abode, room, covered place, cell.' Fleet.—(Skt. and Old Canarese Inscriptions, no. cxxx, line 3, *Ind. Ant.*, Vol. xiii, p. 222, note 44.)

(5) Vikhyātā śāntalākhyā sā Jināgāram akārayat—'The celebrated lady had this Jina temple made'.—(*Ep. Carnat.*, Vol. ii, no. 62, Roman Text, p. 59, last line, Translation, p. 148, last line.)

ĀCHCHHĀDANA—A roof, the eighth covering moulding from the top of the entablature.

(*Kāmikāgama*, liv, 2, *see* under Prāsāda.)

ĀDIKA—Literally first or principal, ? a fast conveyance.

Ādikaṁ syandanaṁ śilpi(n) śibikā cha rathaṁ tatha ।
Sarvair yānam iti khyātaṁ śayanaṁ vakshyate tathā ।

(*M.*, iii, 9-10.)

Ā(R)DRA-PŪSHĀKṚITI (*see* under Liṅga)—A kind of phallus looking like the rising sun.

Liṅgākāram ihochyate . . .
Daivikaṁ ḍiṇḍimākāraṁ mānush(am)ā(r)dra-pūshākṛiti(ḥ) ।

(*M.*, lii, 237, 240.)

ĀDHĀRA—The basement, the plinth.

Dvitalānām alaṅkāraṁ vakshye saṁkshipyate'dhunā ।
Upānādi-stūpi-paryantam ashṭāvimśad vibhājite ।
Ādhārochchaṁ guṇāṁśaṁ syāt pāda-tuṅgaṁ shaḍ-aṁśakam ।

(*M.*, xx, 1, 3-4.)

Janmādi-stūpi paryantaṁ chāṅga-mānam ihochyate ।
Saikāshṭa-pañchakāṁśaṁ harmye tuṅgaṁ vibhājite ।
Ādhāraṁ chāshṭa-bhāgena vedāṁśaṁ charaṇāyatam ।

(*M.*, xvi, 48-50.)

Uttaraṁ vājanādhāram ādheyaṁ śayanaṁ tathā ।
Uddhṛitaṁ cha mūrdhakaṁ chaiva mahā-tauli svavaṁśakam ।
Prachchhādanasy(am) ādhāram etat paryāyam īritam ।

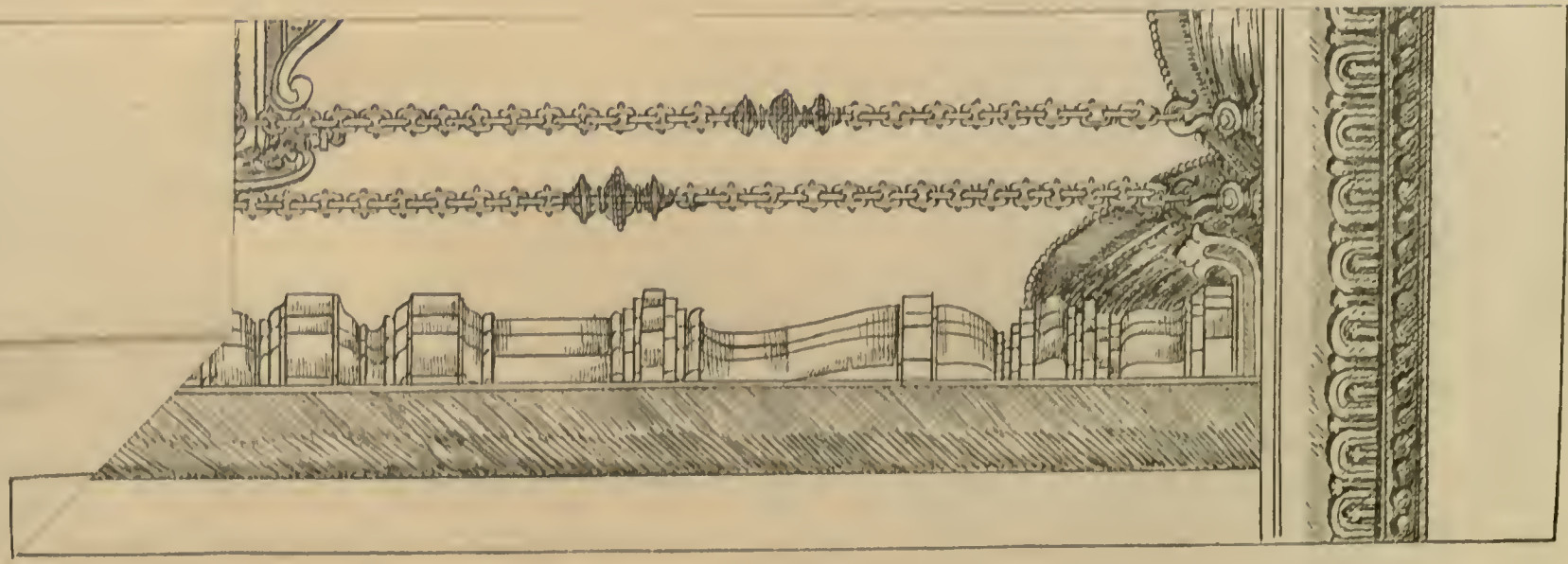
(*M.*, xvi, 56-58.)

Parimāṇa-virodhena rekhā-vaishamya-bhūshitā ।
Ādhāras tu chatur-dvāraś chatur-maṇḍapa-śobhitaḥ ॥
Śata-śṛiṅga-samāyukto Meruḥ prāsāda-uttamaḥ ।
Maṇḍapās tasya karttavyā bhadrais tribhir alaṅkṛitā(ḥ) ॥
Ghaṭanākāra-mānānāṁ bhinnā bhinnā bhavanti te (prāsādāḥ) ।
Kiyanto yeshu chādhārā nirādhārāś cha kechana ॥

(*Garuḍa-Purāṇa*, Chap. xlvii, vv. 38-40.)

Valabhī chhadirādhāraḥ ।

(Hemachandra, *Abhidhāna-chintāmaṇi*, 1011, *Pet. Dict.*)



ĀDHI—Foundations.—(An inscription from Dabhoi, v. III, *Ep. Indic.*, Vol. I, p. 31, *see* footnote, p. 24.)

ĀNDOLA—A swing, a hammock.

Tad-ūrdhve paṭṭikāṁ nyasya kīlāgre cha kabandhanam ।
Chaturbhiḥ śriṅkhalā-yuktam āndolaṁ chaikatopari ।
Deva-bhū-sura-bhūpānām anyeshāṁ śayanārthakam ।

(*M.*, XLIV, 69-71.)

ĀNDHĀRA (-RIKĀ)—A closed verandah, a balcony, a blind screen.

Kāmikāgama, L :

Pañjaro(raś) chārdha-bhāgo vā tri-pādo vātha bhāgikaḥ ।
Alindāndhārikāndhāra-hārā bhāgena kalpitāḥ ॥ (74)
Nava-bhāga-tri-bhāgo vā vyāsa-nāli-gṛihānvitaḥ ।
Bahir āndhārikāndhāra-hārā bhāgena vistṛitāḥ ॥ (76)
Pañchālindaṁ shaṭ-kuḍyaṁ bahir āndhārikāvṛitam ॥ (83)
Āndhārāndhāri-hārokta-khaṇḍa-harmya-viśeshitam (vimānam) ॥ (91)

'Āndhārika' and 'āndhāra' are used as the synonyms of 'gṛiha-piṇḍi' and 'alinda' respectively (*see Kāmikāgama*, LV, 201, under ALINDA).

ĀPAṆA—A shop, a market-place.

(1) *Rāmāyaṇa* (Cock) :

II. 6, 12 : Nānā-paṇya-samṛiddheshu vaṇijām āpaṇeshu ।
II. 14, 27 : Samṛiddhā-vipanāpaṇāṁ . . . (purīm) ।
II. 114, 13 : Saṁkshipta-vipanāpaṇām (Ayodhyām) ।
VII. 43, 13 : Chatvārāpaṇa-rathyāsu ।
II. 71, 41 : Mālyāpaṇeshu rājante nādya paṇyāni va tāthā ।
II. 42, 23 : Samvṛitāpaṇa-vedikām . . . (purīm) ।
II. 41, 21 : Saṁvṛitāpaṇa-vīthikā ।
I. 5, 10 : Su-vibhaktāntarāpaṇām . . . (purīm) ।
II. 57, 15 : Anvantarāpaṇam ।
VI. 112, 42 : (Ayodhyām) sikta-rathāntarāpaṇām ।
VII. 101, 13 : Ubhe (Takshaśilā and Pushkalāvati) . . . suvibhaktāntarāpaṇe ।

(2) *Rājataraṅginī*, I, 201, etc. : Ṛiddhāpaṇam . . . nagaram ।

(3) *Mahābhārata* (*ibid.*) :

XII. 86, 8 : Chatvarāpaṇa-śobhitam (puram) ।
XIII. 30, 17 : (Vārāṇasīm) . . . samṛiddha-vipaṇāpaṇām ।
II. 21, 25 : Mālyāpaṇānāṁ cha dadriśuḥ śriyam uttamām ।

IX. 25, 33 : Vipaṇyāpaṇa-paṇyānām ।
Comm. Nīlkaṇṭha : Vipaṇaiḥ paṇya-vīthikā ।
Āpaṇā haṭṭāḥ paṇyāni vikreya-dravyāṇi ।

(4) Vāpi-kūpa-taḍāga-kuṭṭima-maṭha-prāsāda-satrālayān ।
Sauvarṇa-dhvaja-toraṇāpaṇa-pura-grāma-prapā-maṇḍapān ।
. . . vyadhāpayad ayaṁ Chaulukya-chūḍāmaṇiḥ ।

(Śridhara's Deva pattana Praśasti, v. 10,
Ep. Ind., Vol. II, pp. 440–441.)

ĀPĀNA—A tavern, a liquor-shop, a watering station, huts on road-sides where drinking water is distributed gratis.

Devānaṁ-piye Piyadasi lājā hevaṁ āhā (:) magesu-pi me nigohāni lopāpitāni (:) chhāyopagāni hosaṁti pasumunisānaṁ ; ambāvaḍikyā lopāpitā (;) aḍhak(o)s(i)kyāni pi me uda-pānāni (2) khānāpitāni (;) niṁsidhiya cha kālāpitā (;) āpānān ime bahukāni tatā tatā kālāpitāni paṭibhogyāye pasu-munisānaṁ (.)

'Āpāna cannot have here its usual meaning, namely, tavern, liquor shop.'

'As professor Kern (*Der Buddhismus*, Vol. II, p. 385) assumes, it must denote a watering station. Probably the huts on the roads are meant, where water is distributed to travellers and their beasts gratis or against payment. The usual Sanskrit name is prapā.' Dr. Bühler.

(Pillar edict of Asoka, no. VII, lines 2–3,
Ep. Ind., Vol. II, pp. 270, 274.)

ĀBHAṄGA (*see* under ATIBHAṄGA and BHAṄGA)—A pose in which the idol is slightly bent.

Sarveshāṁ deva-devināṁ bhaṅga-manam ihochyate ।
Ābhaṅga-sama-bhaṅgaṁ chaati-bhaṅgaṁ tridhā bhavet ।

(*M.*, LXVII, 95–96.)

ĀBHĀSA—A class of buildings, pavilions, doors, etc. One of the nine materials of which idols are made, sand glass, lacquer (*M.*, LXII, 15–16), a marble, bas-relief (*M.*, LI, 11), painting (*ibid.*, 12, LVI, 14–16).

A class of buildings :

(1) Etaj jāti-vaśāt proktaṁ chhandādīnāṁ śāntikotsedham ।
Nava-tale tri-pañcha-vidhaṁ vai vipulaṁ kanyasādi-śreshṭhaṁ pravakshyate ।
Kramatas tri-pādam ardha-karaṁ pādaṁ cha idaṁ saṁkalpam ābhāsam idam ।—(*M.*, IX. 103–104.)

Eka-bhūmi-vidhiṁ vakshye lakshaṇaṁ vakshyate'dhunā ।
Jātiś chhandaṁ vikalpaṁ tu chābhāsaṁ tu chatur-vidham ।
Pūrva-hastena saṁ-yuktaṁ harmyaṁ jātir iti smṛitam ।
Chhandaṁ tri-pāda-hastena vikalpaṁ syāt tad-ardhakam ।
Ābhāsaṁ chārdha-hastena harmyādīnāṁ tu mānayet ।

(*M.*, XIX, 1-5.)

Eka-tri-pādam ardhaṁ cha pāda-hastaṁ yathā-kramam ।
Jātiś chhanda(ṁ) vikalpaṁ cha-ābhāsaṁ chatur-vidham ।
Etat tad eva saṁyuktaṁ harmyāṇāṁ māna-kalpanam ।

(*M.*, XXX, 175-177.)

Pavilions of some particular shape :

Devānāṁ bhū-surāṇāṁ cha maṇḍapaṁ jāti-rūpakam ।
Bhūpānāṁ maṇḍape sarve chhanda-rūpam itīritam ।
Vaiśyakānāṁ tu sarveshāṁ vikalpaṁ cheti kathyate ।
Śudrāṇāṁ maṇḍapaṁ sarvaṁ chābhāsam iti kīrtitam ।

(*M.*, XXXIV, 547-550.)

In connexion with doors :

Sapta-viṁśodayaṁ hy-evaṁ tad-ardhaṁ vistṛitaṁ bhavet ।
Evaṁ jāti-vaśāt proktaṁ chhandādīnāṁ pravakshyate ।
Trayoviṁśa-śatāntaṁ syāch chhanda-dvāra-viśālakam ।
Pañcha-viṁśāṅgulam ārabhya dvi-dvyaṅgula-vivardhanāt ।
Eka-viṁśāṅgulam ārabhya dvi-dvyaṅgula-vivardhanāt ।
Eka-viṁśa(ṁ)-śatāntaṁ syād vikalpa-dvāra-vistṛitam ।
Nava-paṅktyaṅgulam ārabhya dvi-dvyaṅgula-vivardhanāt ।
Eka-paṅktyaṅgulādhikyaṁ śatāntam ābhāsa-vistṛitam ।

(*M.*, XXXIX, 28-35.)

In connexion with the phallus :

Jātich-chhanda-vikalpaṁ cha-ābhāsaṁ tu chatur-vidham ।

(*M.*, LII, 49.)

A kind of glass of which idols and statues are made :

Brahmā-vishṇu-maheśānāṁ lakshaṇaṁ vakshyate'dhunā ।
Hiraṇya-rajatenaiva tāmreṇaiva śile vāpi ।
Dārve vā sudhe vāpi śarkarābhāsa-mṛittikā(-bhiḥ) ।
Etais tu navadhā dravyai(ś) chottamādi trayaṁ trayam ।
Chalaṁ chāpy-achalaṁ chāpi nava-dravyais tu nirmitaḥ ।
Lohajair mṛit-sudhā chaiva śarkarābhāsa-mṛittikā ।
Chala-dravyam iti proktam anyeshāṁ chāchalaṁ viduḥ ।

(*M.*, LI, 1-7.)

Three kinds :

Chitrāṅgam ardha-chitrāṅgam ābhāsāṅgaṁ tridhochyate ।
Sarvāṅgaṁ dṛiśya-mānaṁ yat chitram evaṁ prakathyate ।
Ardhāṅga-dṛiśyamānaṁ cha tad ardha-chitram iti smṛitam ।
Ardhārdha-darśanaṁ(dṛiśya)-mānam ābhāsam iti kathyate ।

(*M.*, LI, 8–11.)

Uttamaṁ lohajaṁ bimbaṁ piṭhābhāsaṁ tu chottamam ।

(*ibid.*, 19.)

Cf. Eka-kāle kṛitaṁ sarvaṁ sudhā-mṛit-kaṭa-śarkaraiḥ ।

(*ibid.*, 24–25.)

Berāṇāṁ dravyam ityuktam . . . lohaje vā śile'thavā ।
Dārvābhāsa-ratnena sudhā-mṛit-kaṭa-śarkarā(aiḥ) ।
Ghanaṁ vāpy-aghanaṁ vāpi kuryāt tu śilpi(a)vit-tamaḥ ।

(*M.*, LXII, 15–17.)

(2) Śilodbhavānāṁ v(b)imbānāṁ chitrābhāsasya vā punaḥ ।
Jalādhivāsanaṁ proktaṁ vṛishendrasya prakīrtitam ॥

(*Liṅga-Purāṇa*, Part II, uttara-bhāga, Chap. XLVIII, v. 43.)

(3) Pratimā saptadhā proktā bhaktānāṁ śuddha-vṛiddhaye ।
Kāñchanī rājatī tāmrī pārthivī śailajā smṛitā ॥
Vārkshī chālekhyakā veti mūrti-sthānāni sapta vai ।

'Ālekhyaka' and 'ābhāsa' seem to have the same meaning and indicate the same material.—(*Bhavishya-Purāṇa*, Chap. CXXXI, vv. 2, 3.)

(4) Indhanāni cha vinyasya palālāni cha vinyaset ।
Tasmin loshṭāni vinyasya palālaiś chhādayet punaḥ ॥
Palālābhāsakaiḥ paśchād brīhyābhāsais tushais tathā ।
Āchchhādyādbhir atha siñchech chhākhāṁ prajjvālayet punaḥ ॥

(*Vāstu-vidyā*, ed. Ganapati Śastri, XVI, 32–33.)

(5) Another class of buildings :

(Jāti) Chhandaṁ Vikalpam Ābhāsam ekaike tu dvisaṁkhyakam ।

(*Kāmikāgama*, L, 13.)

A class of kūṭa-koshṭha or top-room, being a combination of the chhanda and vikalpa classes (*Kāmikāgama*, LV, 130, 123–127, *see* under KARṆA-KŪṬA).

(6) *Suprabhedāgama*, XXXIV, 3–4 (refers to the image of Īśvara) :

Chitraṁ chitrārdham evaṁ tu chitrābhāsaṁ tathaiva cha ।
Sarvāvayava-saṁpūrṇaṁ dṛiśyaṁ tach chitram uchyate ॥
Ardhāvayava-saṁdṛiśyam ardha-chitraṁ chaiva cha ।
Paṭe bhittau cha yo(ya) likhyaṁ chitrābhāsam ihochyate ॥

Exactly similar definitions are given in the *Mānasāra*, but therein 'ābhāsa' refers to a material of which an idol is made, whereas in this Āgama, 'ābhāsa' refers to the image itself made in full, middle or quarter relief, and to the paintings made on cloth and walls.

Materials of which images are made :

Mṛiṇmayaṁ yadi kuryāch chech chhūlana(ṁ) tatra prakalpayet ।
Lohajaṁ cha viśesheṇa madhūchchhishṭena nirmitam ।—(*ibid.*, 31.)

(7) Lohajatve madhūchchhishṭam agninārdrīkṛitas tu yat ।
Vastreṇa śodhayet sarvaṁ doshaṁ tyaktvā tu śilpinā ॥

(*Karaṇāgama*, XI, 41.)

(8) Mūrtis tu vṛiksha-pāshāṇa-loha-dravyaiḥ prakārayet ।
The image should be made of materials like timber, stone, and iron.

(*Śilpa-śāstra-sāra-saṁgraha*, XI, 5.)

(9) Sauvarṇī rājatī vāpi tāmrī ratnamayī tathā ।
Śailī dārumayī chāpi loha-sīsa-mayī tathā ॥
Ritikā-dhātu-yuktā vā tāmra-kāṁsa-mayī tathā ।
Sudhā-dāru-mayī vāpi devatārchā praśasyate ॥

(*Matsya-Purāṇa*, Chap. CCLVIII, VV. 20–21.)

(10) Mṛiṇmayī dāru-ghaṭitā lohajā ratnajā tathā ॥
Śailajā gandhajā chaiva kaumudī saptadhā smṛita ।
Kāṁsamayī gandhajā chaiva mṛiṇmayī pratimā tathā ॥

(*Agni-Purāṇa*, Chap. XLIII, VV. 9–10.)

(11) Mṛiṇmaye prativ(b)imbe tu vaset kalpa-yutaṁ divi ।
Dāru-pāshāṇa-dhātūnāṁ kramād daśa-guṇādhikam ॥
Mṛiṇmaye vāhane datte yat phalaṁ jāyate bhuvi ।
Dārujc tad-daśa-guṇaṁ śilāje tad-daśādhikam ॥
Ritikā-kāṁsa-tāmrādi-nirmite deva-vāhane ।
Datte phalam āpnoti kramāt śata-guṇādhikam ॥

(*Mahānirvāṇa-Tantra*, XIII, 22, 30, 31.)

(12) Svarṇādi-lauha-bimbe cha dcha-garbhaṁ na karāyet ॥ (4)
Kāshṭha-pāshāṇa-bimbe cha yat sandhau vidhir uchyate ॥ (6)
Yat bimbe cha kṛite dravyaṁ svarṇaṁ tāmraṁ tu mṛiṇmaye ।
Saile kāshṭhe ishṭikā-chūrṇaṁ bimbaṁ tatra prachakshate ॥ (3)

(*Bimbamāna*, British Museum, MS. 1, 558, 5292, VV. 4, 6 ; MS. 2, 5291, 559, V. 3.)

(13) 'Here they produced a liṅga, of seven metals, viz. gold, silver, tin, lead, copper, iron and bell-metal.'—(Sahyādri-khaṇḍa of the *Skanda-Purāṇa*, *Ind. Ant.*, Vol. III, p. 194, c. 1, last para.)

Cf. 'Again, when the people make images and chaityas which consist of gold, silver, copper, iron, earth, lacquer, bricks, and stone, or (? and) when they heap up the snowy sand (lit. sand-snow, ? ābhāsa), they put in images or chaityas two kinds of śarīras (relics)—(1) the relics of the great Teacher, and (2) the gāthā of the chain of causation'.—(Itsing's work, *Record of the Buddhist Religion*, Transl., Takakusu, p. 150, quoted by V. A. Smith, *Ind. Ant.*, Vol. xxxiii, p. 175.)

ĀMALAKA (*cf.* AMALAŚITA and AMALASĀRA)—A massive circular stone supporting a vase known as *kalaśa*. It figures as the crowning member of śikhara (tower), as the crown of the simulated roofs, and as the cushion-shaped portion of the capital of massive columns (of Aśoka and at Elephanta). In śikhara it has a structural purpose to serve, while in other places it is a mere ornament. It has been frequently referred to by Fergusson, Burgess, Hanell, Coomaraswamy and their followers, but rarely occurs in the *Silpa-śastras* or other Sanskrit texts. The following line has been quoted by some writer from some text of the Mayamata *Silpa-śastra* :

Tathāmalaka-pakvābhaṁ dīrgha-vṛittaṁ cha golakam ||

It is held that the term as referring to the crown of a temple 'must have arisen from a wrong rendering of the Chinese symbols O-mo-lo-kia-ko, describing the great vihāra at Buddha Gaya as Āmalaka.'

Free conjectures have thus been made by modern writers on its origin from the *āmalaka*, fruit or tree, or from lotus. A writer has referred to the matter in the *Calcutta Oriental Journal* (1934, Vol. 1, pp. 189–195) and accepts the lotus-theory because of its popularity as a Buddhist and Hindu symbol, and also because it fits in well as a part of the śikhara.

ĀMALAKA-VAṆṬIKA-PĪṬHA—Chairs with many legs.

(*Mahāvagga*, vv. 10, 2.)

ĀYA (*see* under SHAḌVARGA)—One of the six varga formulas for ascertaining the right proportion of measurement.

ĀYAKA-SKAMBHA (*see* under STAMBHA)—A sort of pillar built upon the rectangular projection from the dome and drum-like parts of the Mahāchaityas (of Amaravati and Nagarjunakonda). Their identification has been rendered certain by the inscriptions they contain; therein these pillars are designated as 'Āyaka-khambha.' According to Vogel (*Ep. Ind.*, xx, p. 2) it 'had no structural function but utilized for sculpturing in low relief,

Buddhist emblems and dedicatory inscriptions.' Vaddari Apparao thinks that it means ' a pillar erected near the gate.'—(*Indian Culture*, October, 1936, pp. 389–390.)

ĀYATANA—An enclosure, earlier an abode, a house, later an enclosed settlement, temples and monasteries, an assembly hall.

(*Ṛ.-V.* IV, 4, 3 ; 37, 1 ; V. 3, 6 ; VI, 21, 4, VII, 56, 22 ; 61, 3 ; X, 91, 2.)

A dwelling, a temple where an idol is installed :

(1) Pūrveṇa phalino vṛikshāḥ kshīra-vṛikshās tu dakshiṇe ।
Paśchimena jalaṁ śreshṭhaṁ padmotpala-vibhūshitam ॥
Uttare saralais tālaiḥ śubhā syāt pushpa-vāṭikā ॥
Sarvatas tu jalaṁ śreshṭhaṁ sthiram asthiram eva cha ।
Pārśve chāpi kartavyaṁ parivārādikālayam ।
Yāmye tapovana-sthānaṁ uttare mātṛikā-gṛiham ।
Mahānasaṁ tathāgneye nairṛitye'tha vināyakam ॥
Varuṇe śrīnivāsas tu vāyavye gṛiha-mālikā ।
Uttare yajña-śālā tu nirmālya-sthānam uttare ॥
Vāruṇe soma-daivatye bali-nirvapaṇaṁ smṛitam ।
Purato vṛishabha-sthānaṁ śeshe syāt kusumāyudhaḥ ॥
Jale vāpi tathaiśāne Vishṇus tu jala-śayyāpi ।
Evam āyatanaṁ kuryāt kuṇḍa-maṇḍapa-saṁyutam ॥

(*Matsya-Purāṇa*, Chap. CCLXX, vv. 28–34.)

(2) Pañchāyatana-madhye tu Vāsudevaṁ niveśayet ।

(*Agni-Purāṇa*, Chap. XLIII, v. 1.)

(3) Devatāyatana-vāpī-kūpa-taḍāgādi-nirmāṇam ।

(*Nārada-Purāṇa*, Part I, Purva-bhāga, Chap. XIII, Colophon.)

(4) Chatuḥ-shashṭi-padaṁ kuryāt devāyatanaṁ sadā ।

(*Bhavishya-Purāṇa*, Chap. CXXX, v. 17 ; *Bṛihat-Saṁhitā*, LVI, 10.)

Pura-madhyaṁ samāśritya kuryād āyatanaṁ raveḥ ॥

(*Bhavishya-Purāṇa*, Chap. CXXX, v. 40 ; *see also* v. 41.)

(5) *Rāmāyaṇa* (Cock) :

I. 5, 13 : purīm . . . devāyatanaiś chaiva vimānair api śobhitām ।
I. 13, 37 : yajñāyatana ।
I. 77, 13 : devatāyatanāni ।
II. 6, 4 : śrīmatyāyatane vishṇoḥ ।

II. 6, 11 : sitābhra-śikharābheshu devatāyataneshu ।
II. 3, 18 : devāyatana-chaityeshu ।
II. 25, 4 : chaityeshv-āyataneshu cha ।
II. 52, 90 : tīrthāny-āyatanāni cha ।
II. 56, 33 : chaityānyāyatanāni cha ।
II. 71, 42 : devāyatana-chaityeshu ।
VII. 101, 15 : ubhe purottame . . . śobhite śobhanīyaiś cha devāyatana-vistaraiḥ ।

(6) *Mahābhārata*, II, 80, 30, etc. (*ibid.*) :

Devāyatana-chaityeshu ।

(7) *Taittirīya-Saṁhitā*, 2, 2, 6, 1, etc. (*Pet. Dict.*) :

Devānām evāyatane yatate jayati taṁ saṁgrāmam ।

(8) *Śatapatha-Brāhmaṇa*, 4, 4, 5, 3 ; 5, 2, 13 ; 6, 2, 1, 14 ; 12, 5, 1, 17, etc. (*ibid.*) :

Kūpā iva hi sarpāṇām āyatanāni ।

Chhāndogya-upanishad, 6, 8, 2, etc. (*ibid.*) :

Sa yathā śakuniḥ sūtreṇa prabaddho diśaṁ diśaṁ patitvānyatrāyatanamalabdhvā bandhanam evopāśrayate ।

(9) Śivasyāyatanaṁ ramyaṁ chakre—'built a beautiful temple of Śiva.'—(An Abu Inscrip. of the reign of Bhīmadeva II, *Ind. Ant.*, Vol. XI, pp. 221, 222.)

(10) Chakārāyatanaṁ śaṁbhor ambhonidhi-samaṁ saraḥ—'he built the temple of Śambhu and a tank equal to the sea.'—(Harsauda Inscrip. of Devapaladeva, line 13-14, *Ind. Ant.*, Vol. XX, p. 312.)

(11) Śrī-Nānigasvāmī devāyatanaṁ kārāpitam ।

'The temple of the illustrious god Nānigasvāmin was caused to be made.'—(Atpur Inscrip. of Śakti-kumāra, line 1-2, *Ind. Ant.*, Vol. XXXIX, p. 191.)

(12) Someśvarāyatana-maṇḍapam uttareṇa ।—(Cintra Praśasti of the reign of Sarangadeva, vv. 40, 41, 42, 45, 72 ; *Ep. Ind.*, Vol. I, p. 284.)

ĀYĀDI-KARMAN (*see* under SHAḌ-VARGA)—The consideration of Āya and other formulas for the verification of correct dimensions.

Evaṁ tu daṇḍakaṁ (grāmaṁ) proktaṁ tasyāyāmam ihochyate ।
Vistārād dvi-daṇḍena vardhayed dviguṇāntakam ।
Yaḥ śubhāyādi-karmārthaṁ daṇḍa-hīnādhikaṁ tu vā ।

(*M.*, IX, 12-14.)

ĀYĀDI-BHŪSHAṆA (*see* under SHAḌ-VARGA)—The consideration of Āya, and other formulas for ascertaining right proportions.

Pādānām api sarveshāṁ lakshaṇaṁ vakshyate'dhunā ।
Āyāmaṁ cha viśālaṁ cha āyādi bhūshaṇādikam ।—(*M.*, XV, 1-2.)

ĀYĀDI-SHAḌ-VARGA (*see* under SHAḌ-VARGA.)—The six formulas for the verification of correct dimensions called āya, vyaya, ṛiksha, yoni, vāra, and aṁśa or tithi.

Evam āyādi shaḍ-vargaṁ kuryāt tatra vichakshaṇaiḥ(ṇaḥ) ।
(*M.*, IX, 74.)

ĀYIKA-PĀDA (*cf.* STAMBHA)—A kind of pillar.

Vedāṁśaṁ chaṅghri-tuṅgaṁ chārdhaṁ prastarotsedham ।
Tad-dvayaṁ āyika-pādaṁ sārdhāṁśaṁ prastaram uttuṅgam ।
Tad-ūrdhvāṅghri guṇāṁśaṁ tad-ardhaṁ ūrdhva-mañchochcham ।
(*M.*, XXVIII, 25-27.)

ĀRĀMA (*cf.* UDYĀNA)—A pleasure-garden, a garden-house, an orchard. A Buddhist convent (vihāra), rest-house for quiet people built 'not too far from the town and not too near, convenient for going and for coming, easily accessible for all who wish to visit him, by day not two crowded, by night not exposed to too much noise and alarm.' The whole compound is enclosed with ramparts of three kinds, namely, brick walls, stone walls and wooden fences, which are again surrounded with bamboo fences, thorn fences and ditches.—(*Chullavagga*, VI, 4, 8 ; 3, 10.)

(1) Nāgasya vāmake yāmye kuryād ārāma-deśakam ।
Pushpodyānaṁ tataḥ kuryāt mukhya-bhallāṭake'pi cha ।
Nṛittāgāraṁ tataḥ kuryān nānā-nṛittāṅganāni cha ।
(*M.*, XL, 119-121.)

(2) Prāntach-chhāyā-vinir-muktā na manojñā jalāśayāḥ ।
Yasmād ato jala-prānteshvārāmān viniveśayet ॥

'Considering that water reservoirs without shade on the margin are not lovely, one ought to have *gardens* laid out on the banks of the water.'
(*Bṛihat-Saṁhitā*, LV, 1, *J.R.A.S.*, N. S., Vol. VI, p. 312.)

(3) *Rāmāyaṇa* (Cock) :
II. 51, 23 : ārāmodyāna-saṁpannāṁ . . . rājadhānīm ।
VII. 70, 13 : ārāmaiś cha vihāraiś cha śobhamānam(-naiḥ) samantataḥ ॥
Śobhitām . . . purīm ॥

(4) *Mahābhārata* (*ibid.*), XII, 69, 11, etc. :
Vihāreshu . . . ārāmeshu tathodyāne ।

(5) Garden :
Kashṭe kāle kalāvapy-abhibhavati jagat kūpa-vāpi-taḍāgair āsannārāma-sattraiḥ sura-sadana-maṭhairm-maṇḍitāyām amushyām . . . nagaryām ।—(Dewal Praśasti of Lalla the Chhinda, v. 20, *Ep. Ind.*, Vol. I, pp. 79, 83.)

(6) Pleasure-garden houses, orchards :

Ārāmāṇy-atanot sarāṇ sarobhiś śobhitāṁtarāiḥ ।
Utphulla-kaṁja-kiṁjalka-puṁja-piṁjaritāntaraiḥ ॥

(Two pillar inscriptions at Amaravati, no. A, Inscrip. of Keta, II, v. 42, *Ep. Ind.*, VI, p. 152.)

(7) Satra-prapā-praśraya-vṛishotsargga-vāpī-kūpa-taḍāgārāma-devālayādi-karaṇopakaraṇārthaṁ cha ।

(Cambay Plates of Govinda IV, line 58, *Ep. Ind.*, Vol. VII, pp. 41-46.)

(8) Kṛishṇayaśasa ārāma—garden (Sir E. C. Bayley, Dr. Vogel) : *vihāra* or monastery (Sir A. Cunningham) of Krishnayaśa.

(Rock Inscriptions in the Kangra valley, the Kanhiara Inscrip., *Ep. Ind.*, Vol. VII, pp. 117-118.)

(9) Grove (Dr. Lüders) :

Yamoḍa-pushkaraṇinaṁ paśchimā pushkaraṇi udapāno *ārāmo* stambho . . . śilā paṭṭo cha— 'a tank, the western tank of these twin tanks, a reservoir, a grove, a pillar and this stone slab' (was caused to be made).

(Three early Brahmi inscriptions, iii, Mathura stone inscrip. of the time of Soṇḍāsa, lines 2-3, *Ep. Ind.*, Vol. IX, p. 247.)

(10) Nānā-deśa-prabhava-suphala-vrāta-bhārāti-namra-vṛiksha-śreṇi-niyama-khachitaḥ śāla-saṁgupta-madhyaḥ ।
Ārāmo'yaṁ surabhi-sumanorāji-saṁrājamānaḥ nānā-vīrullal tasaraṇiḥ pūrṇa-kāmaḥ sadāstām ॥

(Inscriptions from Nepal, no. 23, Inscrip. of Queen Lalita-tripura-sundarī, v. 2, second series, *Ind. Ant.*, IX, p. 194.)

ĀRSHA—Belonging or relating to the ascetics, a phallus of Śiva.

A kind of phallus.—(*Kāmikāgama*, L, 35, 37, *see* under LIṄGA)—(*M.*, LII 232, *see* under LIṄGA.)

ĀLAMBANA—The base, plinth of a railing (vedi) or balustrade.

Sarveshāṁ mukha-bhadrāṇāṁ syāt lakshaṇaṁ vakshyate' dhunā ।
Śikharālambanaṁ chādau tat pālikāvasānakam ।

(*M.*, XVIII, 275-276, etc.)

ĀLAMBANA-BĀHU—The balustrade, a small pillar used as a support to the rail of a staircase : balustrade or a row of balusters

joined by a rail forming an ornamental parapet to a balcony. *See Indian Architecture*, p. 13, *Mahasudassana Sutta*, I, 59 : *Chullavagga*, VI, 3, 3.

ĀLAYA—A temple, a house.

Rāmeśvarāya ghanamaṇṭapa-vapra-saudhāramālayaṁ samatanot samatārasajñaḥ—' he erected a temple (ālaya), adorned with a solid hall (maṇṭapa), a wall (vapra), and a plastered mansion (saudha) to Rāmeśvara'.

(Mangalagiri pillar inscrip., v. 39, *Ep. Ind.*, Vol. VI, pp. 123, 114.)

ĀLIṄGA (*cf.* ANTARITA)—A moulding like the fillet, but with greater projection. It is a flat moulding placed alternately together with the Antarita and is inseparably connected with the latter.

The ninth moulding from the top of the entablature (*Kāmikāgama*, LIV, 2, *see* under PRĀSĀDA).

A crowning moulding of the pedestal and the base (e.g. *M.*, XIII, 126 ; XIV, 50, etc., *see* the lists of mouldings under ADHISHṬHĀNA and UPAPĪṬHA).

A similar moulding of a throne :

Āliṅgāntaritaṁ chordhve prativājanam uchyate ।—(*M.*, XIV, 110.)

ĀVASATHA—A dwelling, an abode, 'a structure of some sort for the reception of guests on the occasions of feasts and sacrifice, later Dharma-śālā or rest-houses.

(*A.-V.*, IX, 6, 5 ; *Taitt. Brā.*, I, 1, 10, 6; III, 7, 4, 6, *Śat. Brā.*, XII, 4, 4, 6; *Chhand. Upa.*, IV, 1, 1 ; *Apa. Śtambha Śrauta Sūtra.*, V, 9, 3 ; *Apa. Dh. Sūtra.*, II, 9, 25, 4 ; *A.-V.*, XIV, 2, 6.)

ĀVARAṆA— Minor and associated deites.

(*M.*, XV, 400.)

ĀVĀSA—A residence, a dwelling-house.

Āvāsa-vāsa-veśmādau pure grāme vaṇik-pathe ॥
Prāsādārāma-durgeshu devālaya-maṭheshu cha ।

(*Garuḍa-Purāṇa*, Chap. XLVI, vv. 2, 3.)

Nirjagāma nṛipāvāsān manya-mānaḥ priyaṁ mahat ।

(*Rāmāyaṇa*, II, 15–28.)

ĀVṚITA (*see* PRĀKĀRA)—An enclosure.

Śikhare chāvṛite pāre sabhā-maṇḍapa gopure . . . mānayet ।

(*M.*, XVIII, 200 f.)

ĀVṚITA-MAṆḌAPA—An open pavilion surrounding a building.

(1) *Kāmikāgama*, XXXV :

Evaṁbhutasya vāsasya samantān maṇḍapaṁ nayet ॥ (97)
Pañcha-bhāgāvasānāntaṁ kuryād āvṛita-maṇḍapam ॥ (98)
Hasta-mānena vā kuryāt tri-hastād arddha-vṛiddhitaḥ ।
Pañcha-daśa-karāntaṁ tu kuryād āvṛita-maṇḍapam ॥ (99)
Maṇḍapena vinā vāpi tena mānena pīṭhikā ॥ (100)

(2) *Suprabhedāgama*, XXXI, 137 :

Prākāra-bhittim āśritya kuryād āvṛita-maṇḍapam ॥

ĀVEŚANA—An architectural office, a studio, a place where ar works are taught and carried out.

Āveśanaṁ śilpi-śālā prapā pānīya-śālikā ।—(*Amarakōsha*, II, 5, 7.)

ĀŚRAMA (*see* under SHOḌAŚA-MANDIRA-CHAKRA)—A temple, a he mitage, a dwelling. A religious establishment comprising the mai temple, its attached tank, kitchen, alms-house, guest-house, stor house, cow-sheds, halls dressing-houses for the deity, bed-room and other houses and flower gardens, orchards and the surroundin walls.

Surebhyaḥ puraṭaḥ kāryo yasyāgneyyāṁ mahānasam ।
Vā(? ka)pi-nirgamane yena pūrvvataḥ sat(t)ra-maṇḍapam ॥
Gandha-pushpa-gṛihaṁ kāryyam aiśānyāṁ paṭṭa-saṁyutam ।
Bhāṇḍāgāraṁ cha kauberyyāṁ goshṭhāgāraṁ cha vāyave ॥
Udagāśrayāṁ cha vāruṇyāṁ vātāyana-samanvitam ।
Samit-kuśendhana-sthānam āyudhānāṁ cha nairṛite ॥
Abhyāgatālayaṁ ramya-saśayyāsana-pādukam ।
Toyāgni-dīpa-sad-bhṛityair yuktaṁ dakshiṇato bhavet ॥
Gṛihāntarāṇi sarvāṇi sajalaiḥ kadalī-gṛihaiḥ ।
Pañcha-varṇaiś cha kusumaiḥ sobhitāni prakalpayet ॥
Prākāraṁ tad-bahir dadyāt pañcha-hasta-pramāṇataḥ ।
Evaṁ vishṇvāśramaṁ kuryyād vanaiś chopavanair yutam ॥

(*Garuḍa-Purāṇa*, Chap. XLVI, VV. 14–19

ĀŚRAMĀGĀRA—A class of the seven-storeyed buildings.

(*M.*, XXV, 29, *see* under PRĀSĀDA

ĀSANA—A class of buildings, a seat, a throne, a bedstead, a mould ing, a site-plan, a temple, a type of dwellings, a sitting posture.

(1) *Mānasāra* :

A class of the three-storeyed buildings.

(*M.*, XXX, 12–31, *see* under PRĀSĀDA

THE THREE-STOR

THE ELEVATION TOWAR

NOTE :-

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KAMALĀNGA AND BRAH
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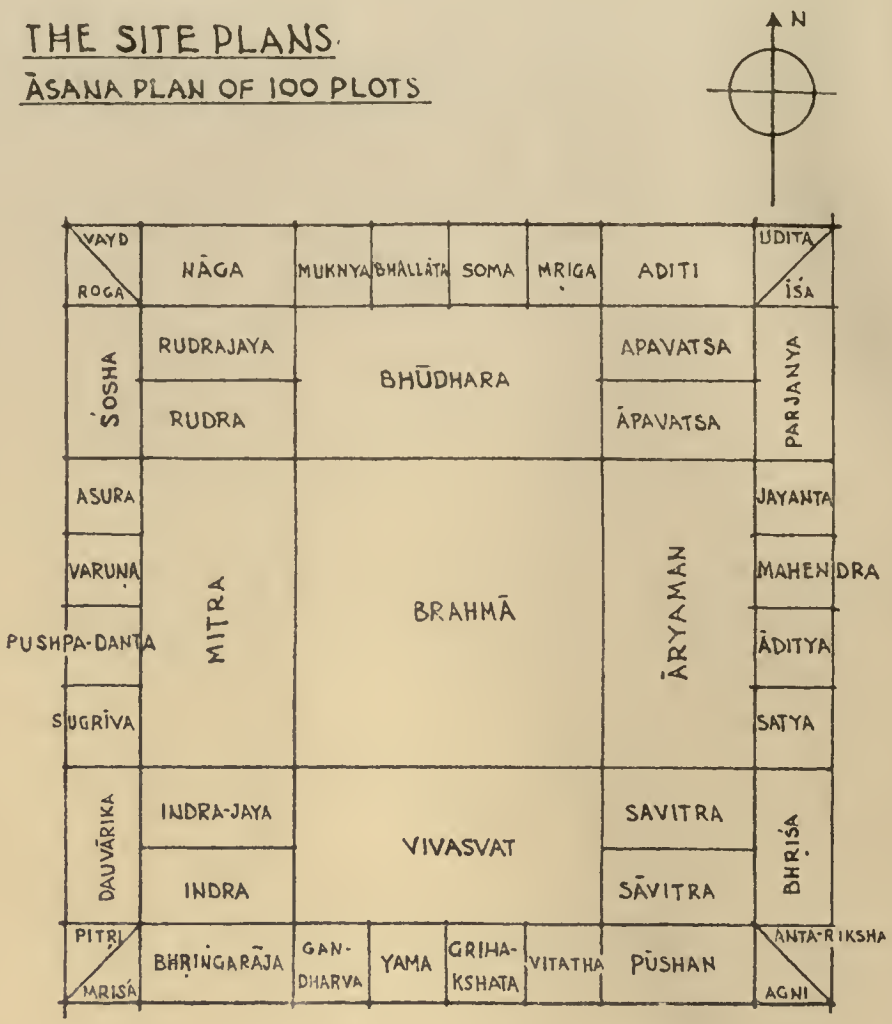
THE SITE PLANS

ĀSANA PLAN OF 100 PLOTS



NOTE:-

THE DETAILS OF THIS PLAN HAVE BEEN OBTAINED FROM ŚILPA-RATNA ETC.

A class of buildings in which the breadth is the standard of measurement ; the temples in which the idol is in the sitting posture.

(*M.*, XIX, 7–11, *see* under APASAṂCHITA.)

A synonym of śayana or bedstead.—(*M.*, III, 10–12, *see* under ŚAYANA.)

A site-plan the area of which is divided into 100 equal squares :

Daśamaṁ śata-padaṁ syān nāmanam(nāmnā) āsanam īritam ।

(*M.*, VIII, 11, *see* details under PADAVINYĀSA.)

A moulding of the base.—(*M.*, XIV, 296, *see* under ADHISHṬHĀNA.)

The seat underneath the base of a pillar :

Tan (pillar's)-mūle chāsanaṁ kuryāt pādukaṁ vā sahāmbujam ।

(*M.*, XV, 31.)

A seat as opposed to a bedstead :

Evaṁ tu śayanādīnām āsanānāṁ cha dārubhiḥ(rūṇi) ।

(*M.*, XLIV, 74.)

A throne :

Devānāṁ bhū-patīnāṁ cha bhūshaṇārthaṁ tu toraṇam ।
Āsanopari vinyasya sarveshāṁ toraṇam ।—(*M.*, XLVI, 1, 3.)
. . . toraṇam ।
Devānāṁ bhū-patīnāṁ cha sthānakasyāsanasya cha ।

(*ibid.*, 29–30.)

Devānāṁ bhū-patīnāṁ cha sthānakāsana-yogyakam ।
Mukta-prapāṅga-mānaṁ cha lakshaṇaṁ vakshyate'dhunā ।

(*M.*, XLVII, 1–2.)

Devānāṁ chakravaryādi-bhū-pālānāṁ cha yogyakam ।
Kalpa-vṛiskhādīnāṁ tāraṁ mānaṁ lakshaṇaṁ uchyate ।
Toraṇodaya-pādaṁ tu pādārdhādhikodayam ।
Evaṁ vṛikshasya tuṅgasya āsanasyopari nyaset ।
Āsanāyāma-madhye tu toraṇasyopari nyaset ।—(*M.*, XLVIII, 1–5.)

The sitting posture (of the Garuḍa image) :

Sthānkaṁ chāsanaṁ chaiva gamanaṁ cha yathāvidhi ।

(*M.*, LXI, 19.)

Evaṁ proktaṁ siṁha-rūpaṁ . . . ।
Śayanaṁ vā sthānakaṁ chāsanaṁ vā . . . ।—(*M.*, LXIII, 44, 49.)

The sitting posture in connexion with the plumb-lines :

Sarveshāṁ deva-edvīnāṁ ṛiju-sthānakaṁ chāsane ।
Māna-sūtra-vidhiṁ samyak(g) lakshaṇaṁ vakshyate'dhunā ।

(*M.*, LXVII, 1–2.)

(2) *Rāmāyaṇa* (Cock):

V, 15, 4: Bahvāsana-kuthopetām . . . (aśoka-vanikām) ।
VII, 42, 16 f.: Bahvāsana-gṛihopetām . . . aśoka vanikām ।
. . . praviśya Raghu-nandanaḥ ।
Āsane cha śubhākāre pushpa-prākāra-bhūshite ॥
Kuśāstaraṇa-saṁstīrṇe Rāmaḥ saṁnisasāda ha ।

(3) *Kātyāyana-Śrauta-sūtra* (*Pet. Dict.*) Sabhāsana (4, 15, 33); Śālāsana (7, 5, 8); Brahma-yajamānayor āsane (1, 8, 27; 7, 4, 32; 9, 9, 12, 4, 15, etc.).

(4) *Manu-Saṁhitā* (*ibid.*):

Sahāsana (8,281); Sahakhaṭvāsana (8,357); Rahaḥ sthānāsanam (6,59); āsaneshūpakalpiteshu (3,208); and Kumāra-sambhava (7,12); Saṁprāptāya tvathithaye pradadyād āsanodake (3,99); dadyāch chaivāsanaṁ svakam (4,154); *cf.*:

Rājño māhātmike sthāne sadyaḥ śāuchaṁ vidhīyate ।
Prajānāṁ parirakshārtham āsanaṁ chānna-kāraṇam ॥ (5, 94).
Amātya-mukham . . . ।
Sthāpayed āsane tasmin iva naḥ kārye kshaṇe nṛiṇām ॥ (7, 141).

(5) *Bhagavadgītā* (*ibid.*), 6, 11:

Śuchau deśe pratishṭhāpya sthiram āsanam ātmanaḥ ।

(6) *Nalopākhyāna* (*ibid.*) 5, 4:

Āsaneshu vividheshvāsīnaḥ ।

(7) *Raghu-vaṁśa* (ed. Cal. Bibl. 134), 2, 6:

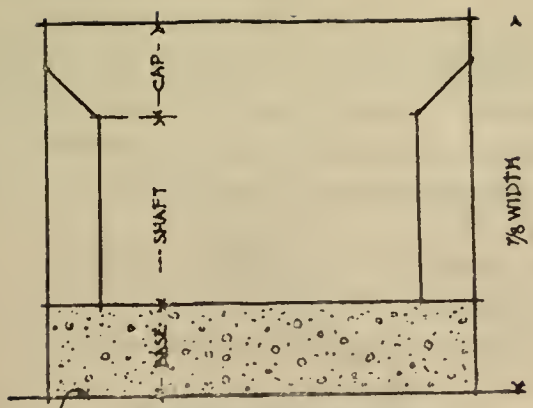
Śayyāsane'dhyācharite preyasā ।

Cf. padmāsana, bhadrāsana, vajrāsana, vīrāsana, and svastikāsana (*see M. W. Dict., loc. cit.*).

(8) Bahu-hathika-āsana bhagavato Māhadevasa—'The seat of the blessed Mahādeva (under the banyan tree) Bahuhastika (where many elephants are worshipping).'

(Bharaut Inscriptions, no. 160, *Ind. Ant.*, xxi, p. 239.)

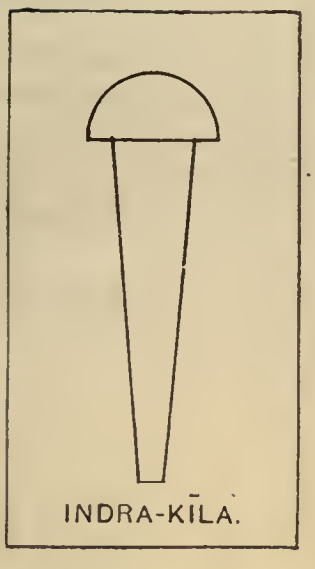
ĀSANDA—} A settee, a throne-like seat, large couches, cushions,
ĀSANDI— } chairs, rectangular chairs, a throne carried by four persons (*Digha Nikaya* ii, 23; *Chullavagga*, vi, 14, 1; *Mahāvagga*, v, 10, 3. *See* Childers *Dictionary*, Rhys Davids and Oldenberg, Buddhist Sutta, 27, 197, 209), with wooden frame-work for chiefs and kings.—(*A.-V.*, xv, 3, *Ait. Bra.* viii, 5; 6; 12.)



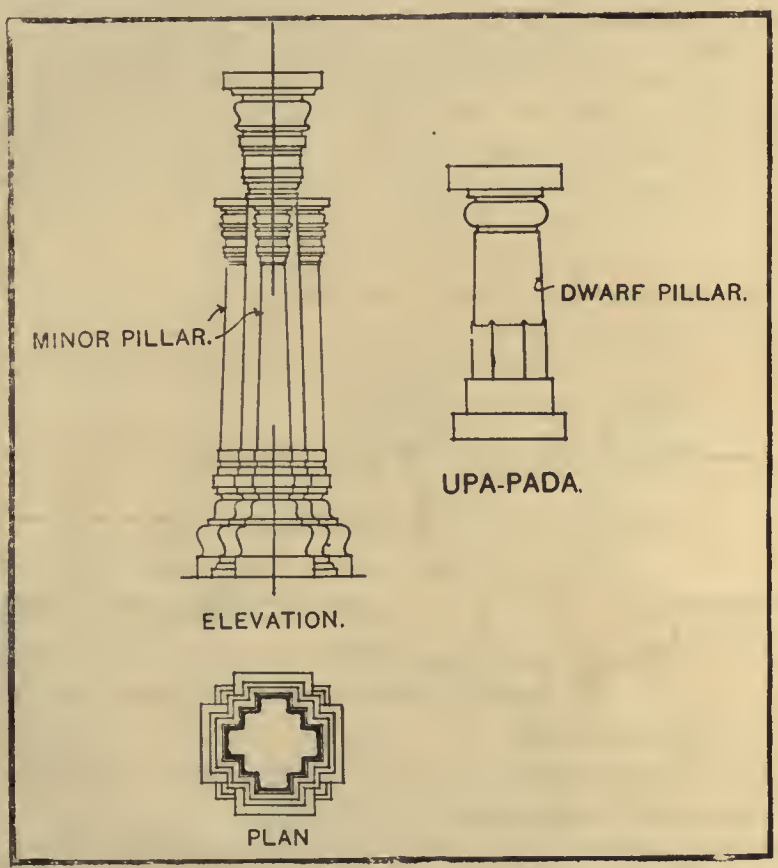
SUGGESTED SECTION OF FOUNDATION

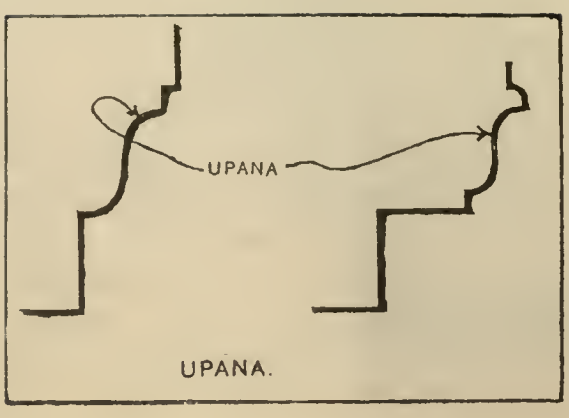
THE WIDTH OF THIS FOUNDATION HAS BEEN TAKEN TO BE 3 CUNTS (THAT IS 4-6") INSTEAD OF 3 KOLS

ISHṬAKA

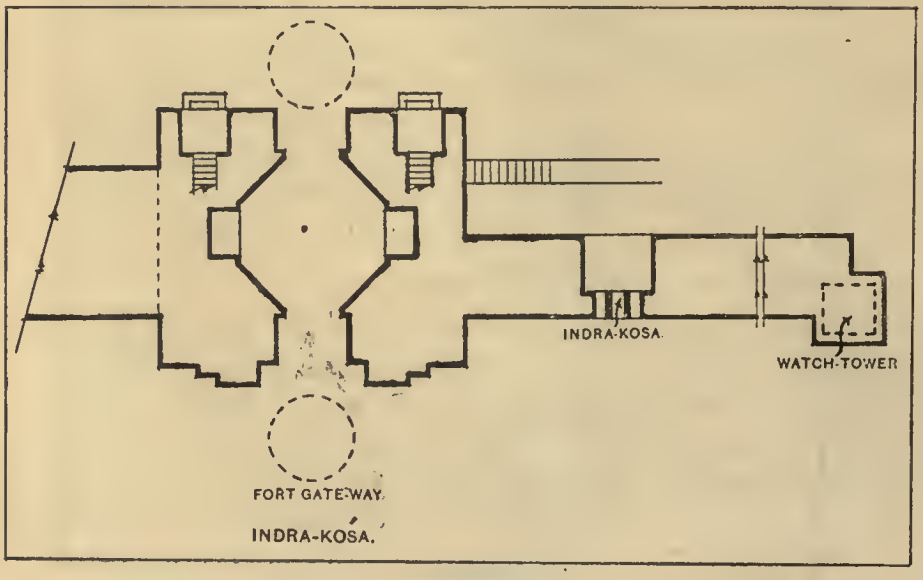


INDRA-KĪLA.





UPANA.



INDRA-KOSA.

ĀSTHĀNA-MAṆḌAPA (*see* under MAṆḌAPA)—An assembly room, an audience-hall, a sitting room, a drawing room, a recreation ground with a pavilion in it.

(1) Āsthāna-maṇḍapaṁ chaiva chatur-dikshu vidikshu cha ।

(*M.*, XXXII, 73.)

Samāśraṁ vātha vedāśraṁ kuryād āsthāna-maṇḍapam ।

(*M.*, XXXIV, 208.)

Āsthāna-maṇḍapaṁ kuryāt pushkariṇyāṁ cha vāyave ।

(*M.*, XL, 118.)

(2) Ṛiksha-bhallāṭa-someshu bhaved āsthāna-maṇḍapam ।

(*Kāmikāgama*, XXXV, 191.)

(3) *See* first Drākshārāma pillar Inscrip. 1, 9, *Ep. Ind.*, Vol. IV, pp. 329, 330, under MAṆḌAPA.

(4) A hall (Vanapalli Plates of Anna-Vema, v. 10, *Ep. Ind.*, Vol. III, pp. 61, 59).

Cf. Āsthāna-śilā-maṇḍapa (First Drākshārāma pillar Inscrip., line 9, *Ep. Ind.*, Vol. IV, pp. 329, 330).

(5) *Cf.* 'The curious long series of subterranean chambers to the west of Chitaldoorg, now forming part of the Ankli maṭha, are deserving of notice. They are approached by a good stone staircase, which leads down to rooms of various sizes at different levels. In these are shrines, liṅgas, baths, and pedestals, the latter apparently for yogāsana.'

(*Ep. Carnat.*, Vol. XI, Introduct., pp. 31–32.)

ĀSYA—A facia.

I

IKSHU-KĀNTA—A class of the six-storeyed buildings.

(*M.*, XXIV, 55, *see* under PRĀSĀDA.)

INDRA-KĀNTA—A class of the four-storeyed buildings, and of the gate-houses.

(*M.*, XXII, 60–88, *see* under PRĀSĀDA.)

A class of gate-houses.—(*M.*, XXXIII, 558, *see* under GOPURA.)

INDRA KĪLA(-KA)—A pin, a nail, a bolt.

Phalakā bhājanordhve tu tad-urdhve chendrakīlakam ।
Tataḥ pratimā-saṁyuktaṁ sthāpayet sthapatir budhaḥ ।

(*M.*, XII, 125–126.)

An iron bolt : aratnir indrakīlaḥ—the iron bolt is one cubit long.

(*Kauṭilīya-Artha-śāstra*, Chap. XXIV, p. 53.)

INDRA-KOŚA— } A projection of the roof of a house forming
INDRA-KOSHṬHA— } a kind of balcony, holes or jali work in arches, crenelle, an opening in a parapet for shooting through.

Aṭṭālaka-pratolī-madhye tri-dhānushkādhishṭhānaṁ sāpi-dhānach-chhidra-phalaka-saṁhatam itīndrakośaṁ kārayet ।

(*Kauṭilīya-Artha-śāstra*, Chap. XXIV, p. 52.)

ISHṬAKA—Brick, a building material, burnt (pakva, *Śāt. Brā.*, VI, 1, 2, 22 ; VII, 2, 1, 7), naturally perforated (svayamātṛinnā, *Taitt. Sam.*, IV, 2, 9 ; 3, 2 ; etc., V, 2, 3), of all colours (*Taitt. Sam.*, V, 7, 8), circular (maṇḍalā, *Taitt. Sam.*, IV, 4, 5 ; V, 3, 9), cornerless (vikarṇi, *Taitt.*, V, 3, 7), conical (choḍā, *Taitt. Sam.*, IV, 4, 3), gold-headed or enamelled (vāmabhṛit, *Taitt. Sam.*, IV, 2, 9 ; V, 5, 3), pot-shaped (kumbhā, *Taitt. Sam.*, V, 6, 1). Thus the brick-laying was already a developed art in the age of the *Yajurveda* (1000 B.C.). But in 3000 B.C. burnt bricks were in use in Mohen-jodaro, etc.

(1) Śilābhiś cheshṭakair vāpi dārubhih . . .—(*M.*, XXX, 95.)
Eka-dvā-daśa-bhūmyantaṁ cheshṭake dvā-daśāntataḥ ।
Harmyaṁ nirmānato vakshye prathameshṭaka-lakshaṇam ।

(*M.*, XII, 188–189.)

(2) Tṛiṇādi-nirmitaṁ yo dadyāt parameśvari ।
Varsha-koṭi-sahasrāṇi sa vased deva-veśmani ॥
Ishṭaka-gṛiha-dāne tu tasmāch chhata-guṇaṁ phalam ।
Tato'yuta-guṇaṁ puṇyaṁ śilā-geha-pradānataḥ ॥

(*Mahānirvāṇa-Tantra*, XIII, 24, 25.)

(3) 'The following written declaration (vyavasthā) is (also) granted (for the guidance of the donee) : Mansions of burnt tiles (bricks) may be built (without special permission) ; . . . with the written declaration thus defined (the village) was placed in the (hands) of the assembly as a deva dāna, with all immunities, to the (God) Mahādeva of the Yajñeśvara (temple).'—(Velurpalaiyam plates, lines 47 to 63 ; no. 98, *K. S. I. I.*, Vol. II, p. 512.)

(4) 'Mansions and large edifices may be built of burnt bricks.'

(Tandantottam Plates, no. 99, lines 26–38 : *K. S. I. I.*, Vol. II, p. 531.)

(5) 'The walls of the temple . . . are in great preservation, the bricks, which compose them, are of well-burnt red earth, each measuring 12 inches by 7 and 1½ thick, disposed with about one-eighth of an inch of chunam between them, and the layers, being quite even, look as if the plaster had just been stripped off.'

THE SITE PLANS

UGRA PĪTHA PLAN OF 36 PLOTS

VĀYU	MUKHYA	SOMA	ADITI	ĪŚA
ŚOSHA	RUDRA	BHŪDHARA	APAVAṬSA	JAYANṬA
VARUṆA	MITRA	BRAHMĀ	ĀRYAKA	ĀDITYA
SUGRĪVA	INDRA	VIVASVAT	SAVITRA	BHṚIŚA
PITṚI	BHRIṄGA-RĀJA	YAMA	VITAṬHA	AGNI

NOTE:-

THIS IS AN AMPLIFICATION OF THE UPA PITHA TYPE

Lieutenant Fagan (*Ceylon Government Gazette*, August 1, 1820) after describing about twenty buildings (temples and edifices) made of such burnt bricks concludes :

'I will leave it to the curious in Ceylon antiquities to discover the reason that the people, who built these great edifices, should take the trouble of making so many millions of bricks for the work, where there was abundance of fine stone well calculated for their construction in the immediate neighbourhood.'—(An account of the ruins of Topary, *Ind. Ant.*, Vol. XXXVIII, p. 110, c. 2, line 12 f. ; c. 2, para. 2.)

I

IŚA-KĀNTA—A class of the eleven-storeyed buildings.

(*M.*, XXIX, 10–11, *see* under PRĀSĀDA.)

IŚVARA-KĀNTA—A site-plan, a class of buildings.

A site-plan in which the whole area is divided into 961 equal squares :

. . . chaika triṁśat-vidhāne tu ।
Eka-shashṭi-samādhikyaṁ padaṁ nava-śata-yutam ।
Evam īśvara-kāntaṁ syāt . . . ।

(*M.*, VII, 46–48, *see* further context under PADA-VINYĀSA.)

A class of the four-storeyed buildings.

(*M.*, XXII, 44–46, *see* under PRĀSĀDA.)

U

UGRA-JĀTI—Base-born, people of low castes, for whom buildings of certain number of storeys are prescribed.

(*M.*, XI, 138.)

UGRA-PĪṬHA—A site-plan in which the whole area is divided into 36 equal squares.

(*M.*, VII, 7, *see* further details under PADA-VINYĀSA.)

UCHCHHRAYA—A kind of pillar, pillars of victory.

Giri-śikhara-tarū-talāṭṭālakopatalpa-dvāra-śaraṇochchhraya (raised places of shelter) Kielhorn quotes also Drs. Indraji and Bühler who translate 'śaraṇa' by 'shelter' and 'uchchhraya' by 'pillars of victory'.

(Junagadh rock Inscrip. of Rudradaman, line 6, *Ep. Ind.*, Vol. VII, pp. 43, 46 and note 3.)

UṆHISA—A headline running along the top of the banisters, a figure-head at the lower end of such a head line.

(Rhys David's *Buddhist Sutta*, p. 262
Sudassanasutta, 1, 59.)

UTTAMA-NAVA-TĀLA—A sculptural measurement : in this system the whole height of an image is divided into 112 equal parts which are proportionately distributed among the different parts of the body from head to foot. The measurement of breadth of the various limbs is not included in these 112 parts. The measurement of the arms is also excluded from these.

For details, *see M.*, LIX, 14–64, under TĀLA.

UTTAMA-DAŚA-TĀLA—A sculptural measurement in which the whole height of an image is generally divided into 120 equal parts.

(*M.*, LXV, 2–179, *see* details under TĀLA.)

UTTAMBHA—A kind of rectangular building.

(*Garuḍa-Purāṇa*, Chap. XLVII, vv. 21–22
26–27, *see* under PRĀSĀDA.)

UTTARA—A rectangular moulding, a fillet. (For its synonyms, *see M.*, XVI, 56–58 below.) It is used sometimes to signify the whole architrave or the beam, i.e. the lowest division of the entablature, which extends from column to column ; also applied to the moulded frame which bounds the sides and head of a door or window opening. It also denotes a particular member of the pedestal and entablature and resembles the corona or the square projection of the upper part of the cornice, having a broad and vertical face generally plain.

(*Cf.* Rām Rāz, *Ess. Arch. Hind.*, p. 25.)

(1) *Mānasāra :*

A crowning moulding of the pedestal :

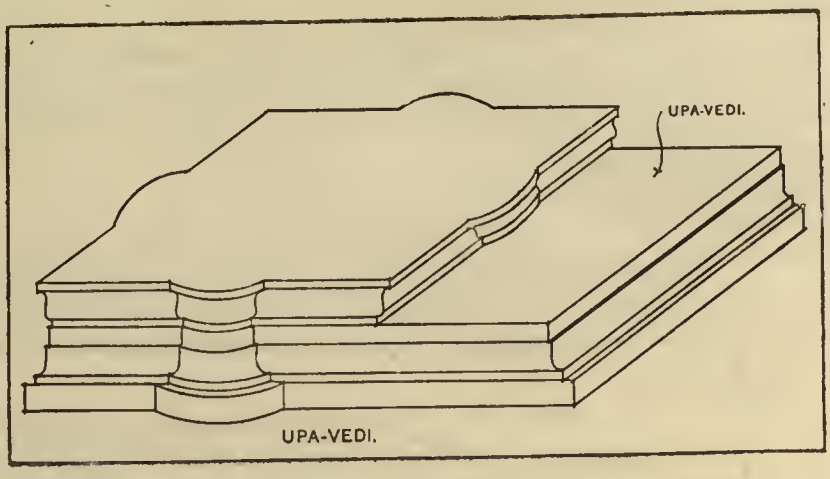
Uttaraṁ chāṁśakaṁ chordhve kshepaṇārdhādhikāmbujam ।
Uttaraṁ chārdha-kampaṁ syāt tad-ūrdhve cha saro-ruham ।

(*M.*, XIII, 67, 76, etc., *see* the lists of
mouldings under UPAPĪṬHA.)

A similar moulding of the column :

Adhishṭhānoparishṭ(h)āt tu chottarādho'vasānakam ।
Upapīṭhoparishṭ(h)āt tu janmādau chottarāntakaṁ ।
Pādāyāmāvasānaṁ cha adhīshṭhānodayena cha ।

(*M.*, XV, 7–9.)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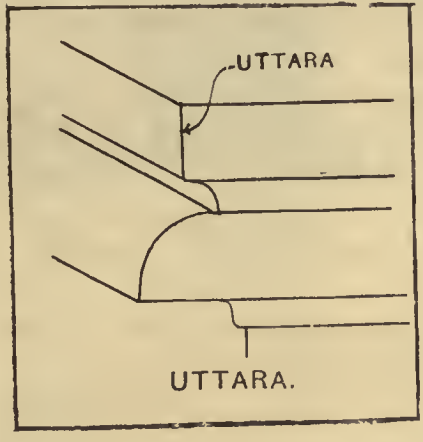
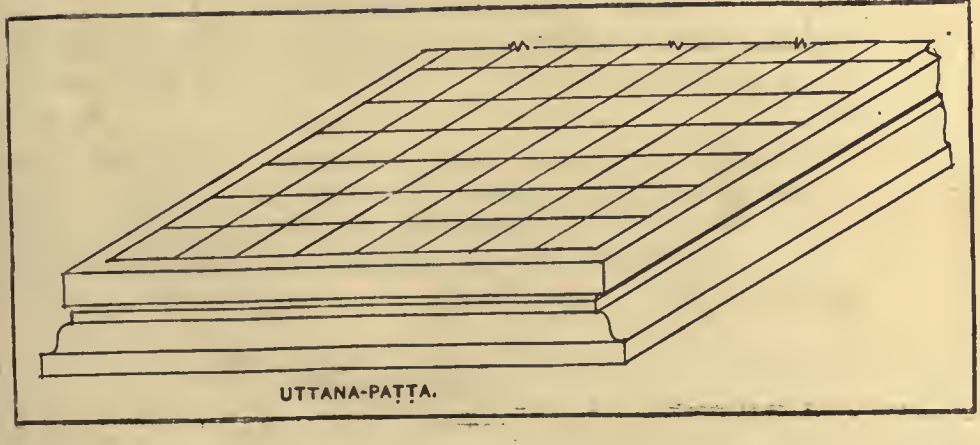
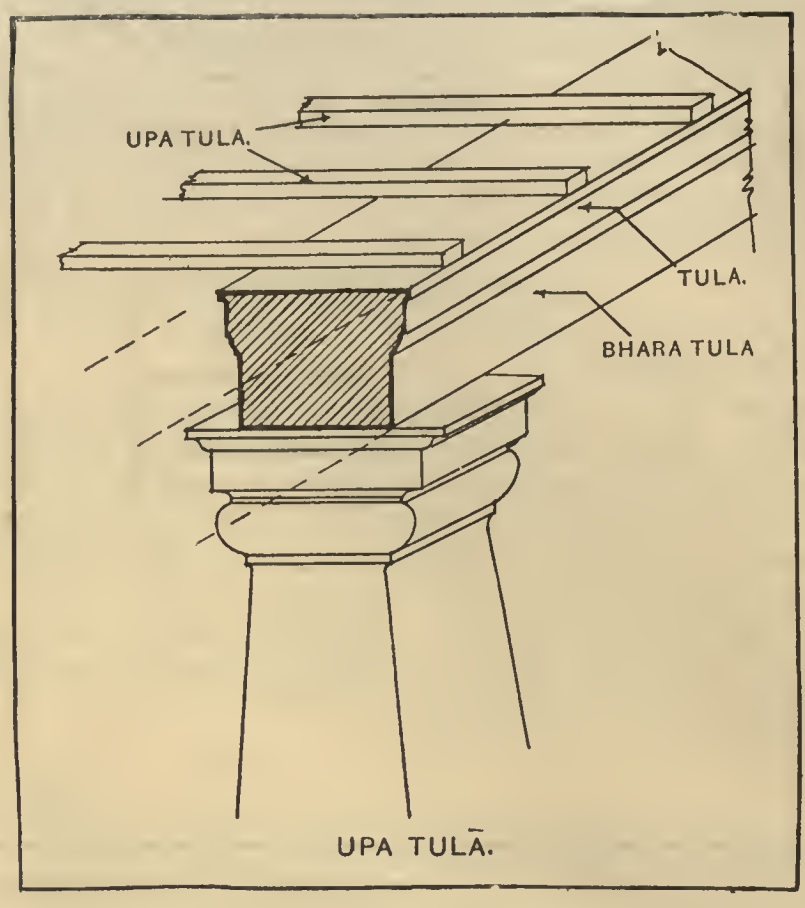

UTTARA
UTTARA.


UTTANA-PAṬṬA.



UPA TULĀ.

A similar moulding of the entablature :

Uttarordhve chatush-pañcha-shaṭ-saptāshṭakaṁ bhavet ।
Pūrva-bhāgika-mānena chottarochchaṁ guṇāṁśakaṁ ।

(*M.*, XVI, 30, 59, etc., *see* the lists of mouldings under PRASTARA.)

Its synonyms (or terms of similar signification) :

Uttaraṁ bhājanam ādhāraṁ ādheyaṁ śayanaṁ tathā ।
Uddhṛitaṁ cha mūrdhakaṁ chaiva mahātauli svavaṁśakam ।
Prachchhādanasyādhāram etat paryāyam īritam ।

(*M.*, XVI, 56–58.)

(2) *Vāstu-vidyā*, ed. Ganapati Śāstri, IX, 1 :

Atha vakshyāmi saṁkshepāt pāda-mānaṁ yathāvidhi ।
Uttaropānayor madhya-gatam etat prakīrtītam ॥

(3) *Kāmikāgama*, (LIV, *see* under STAMBHA) : The moulding at the top of the entablature.

(4) *Suprabhedāgama* (XXXI, 107, *see* STAMBHA) : A crowning moulding of a column.

UTTAROSHṬHA (*see* under STAMBHA)—The upper lip, the ovolo or the moulding above the cavetto or mouth (*see* Gwilt., *Encycl.*, fig. 867, and also the list of mouldings in the five orders, e.g. Art. 2553).

Stambhaṁ vibhajya navadhā vahanaṁ bhāgo ghaṭo'sya bhāgo'nyaḥ ।
Padmaṁ tathottaroshṭhaṁ kuryād bhāgena ॥

(*Bṛihat-Saṁhitā*, LIII, 29.)

UTTĀNA-PAṬṬA—A pavement.

Vyḍdhaṁ chottāna-paṭṭaṁ sakala-kanakhale . . . yaś chakāra— ' who made a broad pavement of (stone) slabs in the whole of Kanakhala.'

(An Abu inscrip. of the reign of Bhumadeva II, v. 9, *Ind. Ant.*, Vol. XI, pp. 221, 222.)

UTSAVA (*see* UTSEDHA)—The height of a draught animal (vāhana) in comparison with that of the idol of whom the former is the vehicle.

(1) Mūla-bera-vaśaṁ mānam utsavodayaṁ īritam ।—(*M.*, LV, 34.)
Brahmā vishṇu(ś cha)-rudrāṇāṁ buddhasya ja(ji)nakasya cha ।
Anyaiś cha . . . mānaṁ tu saṁgraham ।
Evaṁ tu chotsavādīnāṁ sthāvara(ṁ)-jaṁgamādīnām ।

(*M.* LXIV, 91–93.)

Vihaṅga-rāja-mānaṁ cha lakshaṇaṁ vakshyate'dhunā ।
Mūla-bera-samottuṅga(ṁ) tat-tri-pādārdham eva vā ।
Utsavochcha-samaṁ vāpi dvi-guṇaṁ tri-guṇaṁ tu vā ।
Tri-guṇaṁ vādhikaṁ vāpi tach-chatur-guṇam eva vā ।
Evaṁ navodayaṁ proktam uttamādi trayaṁ trayam ।

(*M.*, LXI, 1-5.)

Vṛishasya lakshaṇaṁ samyag vakshyate'dhunā ।
Vāyor abhimukhaṁ sthāpyaṁ pīṭhe vā chotsave'pi vā ।
Vimāne maṇḍape vāpi chāropari parinyaset ।—(*M.*, LXII, 1-3.)

Three types :

Mūla-berodayaṁ śreshṭha(ṁ) tri-pādaṁ madhyamaṁ bhavet ।
Tuṅgārdhaṁ kanyasaṁ proktaṁ tri-vidhaṁ chotsavodayam ।

(*M.*, LV, 35 -36.

Berotsedha-samaṁ śreshṭhaṁ karṇāntaṁ madhyamaṁ bhavet ।
Bāhvantaṁ kanyasaṁ proktaṁ utsavaṁ vṛishabhodayam ।

(*M.*, LXII, 10-11.)

Nine kinds :

Evaṁ liṅga-vaśāt proktaṁ vishṇu-bera-vaśo(ād u)chyate ।
Mūla-bera-samaṁ vāpi netrāntaṁ vā puṭāntakam ।
Hanvantaṁ bāhu-sīmāntaṁ stanāntaṁ hṛidayāntakam ।
Nābhyantaṁ meḍhra-sīmāntaṁ nava-mānaṁ chotsavodayam ।
Tad-ardhaṁ kautukotsedhaṁ kanyasādi trayaṁ trayam ।

(*M.*, LXIV, 2 4-28.

Athavā tena mānena shoḍaśāṁśaṁ vibhājite ।
Ekaikāṁśakaṁ tasmāt pañcha-viṁśāṁśakāntakam ।
Kanyasād uttamāntaṁ syān nava-mānaṁ utsavodayam ।
Athavā mūla-berasya keśāntaṁ tu bhruvāntakam ।
Netrāntaṁ nāsikāgrāntaṁ hanvantaṁ bāhu-sīmakam ।
Stanāntam hṛidayāntaṁ cha nāvyantaṁ cha navodayam ।
Kanyasād uttamāntaṁ syāt nava tad utsavodayam ।
Utsave chārdha-mānena kautukodayam īritam ।
Tan-mānaṁ chāshṭa-bhāgaikaṁ nava-bhāgāvasānakam ।
Kanyasād uttamāntaṁ syān nava-mānaṁ kautukodayam ।

(*M.*, LV, 37-46.

It is measured in the idol's finger :

Mūla-berāṅgulaṁ chaiva mānayed utsavodayam ।—(*M.*, LV, 55.)
Tat-tan-māna-vaśāt kechin mūla-bera-vaśān nayet ।
Utsave chotsavaṁ proktam aṅgulaṁ māna-viśvataḥ ।

(*M.*, LXI, 21-22.)

UTSAVA-MAṆḌAPA—A festive hall.

See under MAṆḌAPA and *cf.* :

Gopura-prākārotsava-maṁṭapair upachitaṁ śrīrāmabhadrāya cha ।

(Kondavidu Inscrip. of Krishnaraya, v. 27, *Ep. Ind.*, Vol. VI, pp. 237, 231.)

UTSAVA-VIGRAHA—Images for procession, idols to be carried in procession.

Utsava-vigrahāla samarpiṁchi—'presented idols to be carried in procession'.

(Kondavidu Inscrip. of Krishnaraya, v. 28, lines 118–119, *Ep. Ind.*, Vol. VI, pp. 231, 232, 237.)

UTSEDHA (*see* MĀNA)—The height called śantika, paushṭika, jayada, sarvakāmika or dhanada, and adbhuta : they are respectively equal to the breadth, $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{1}{3}$, and twice of it.

(*See M.*, XXXV, 22–26, under ADBHUTA.)

The height of a buidling is stated to be measured from the basement to the top of the dome :

Utsedhaṁ janmādi-stūpikāntam—(*M.*, XXXV, 26.)

The technical names of the proportions of the height are significant. The first one is called 'śāntika' or peaceful. In this proportion the height is equal to the breadth (*M.*, XXXV line 22) ; and this is aesthetically a gracefu proportion. The second one is called 'paushṭika' which might be rendered as strong, eminent, rich, complete, or perfect. In this proportion the height is $1\frac{1}{4}$ of the breadth (*ibid.*, line 22) ; and this would give the building a good stability. The third one is called 'jayada' or joy-giving. In this proportion the height is $1\frac{1}{2}$ of the breadth (*ibid.*, line 22) ; and this gives a pleasant appearance to the building. The fourth one has two names, 'sarva-kāmika' or good in every way, and 'dhanada' or wealth-giving. In this proportion the height is $1\frac{3}{4}$ of the breadth (*ibid.*, line 23) ; and according to the literal meaning of the term 'sarvakāmika' this would make the building strong as well as beautiful. The fifth or last one is called 'adbhuta' or marvellous. In this proportion the height is twice the breadth (*ibid.*, line 22) ; and this would give a wonderful loftiness and gorgeous look to the building.

The comparative height of the component members of an architectural structure is technically called 'gaṇya-māna.' The details thereof will be found under GAṆYA-MĀNA.

Six kinds of measurements are prescribed for an image : māna (full height of the image), pramāṇa (breadth), parimāṇa (width

or circumference), lambamāna (length by the plumb-lines), unmāna (thickness) and upamāna (measurement of the interspace, e.g. between the two feet, *M.*, LV, 3–9, *see* under MĀNA). Of these, māna or height is stated to be compared with nine objects such as the adytum, door, basement, and the height of the worshipper, etc. (*ibid.*, lines 11–14, *see* under MĀNA). In each case, the height of the idol admits of nine kinds as it is made equal to nine successive parts of the object (*ibid.*, lines 15–33). When compared with the worshipper, it is equal to his full height, reaches his hair-limit (on the forehead), nose-tip, chin, arm-limit (to the shoulder), breast, heart, navel and sex-organ :

Kanyasād uttamāntaṁ syād yajamānodayaṁ param ।
Keśāntaṁ nāsikāgrāntaṁ hanvantaṁ bāhu-sīmakam ।
Stanāntaṁ hṛidayāntaṁ cha nābhyantaṁ meḍhra-sīmakam ।
Navadhā kanyasāntaṁ syāt sthāvaraṁ jaṅgamodayam ।

(*M.*, LV, 30-33.)

The height of the riding animals (vāhana) of the gods is divided into two kinds, utsava and kautuka (*see* details under these terms). The latter is stated to be half of the former, and it does not seem to bear any other independent signification. The former is compared with the height of the main idol, exactly in the same way as the idol is compared with the height of the worshipper (*see* e.g. *M.*, LXIV, 24–28 ; LV, 40–43, under UTSAVA).

UDAPĀNA—A well, a pool or pond near a well.

Ima-kshāyamada-pushkaraṇīnāṁ paśchima-pushkaraṇiṁ udapāna-ārāma-stambhaḥ ।—(Mathura inscriptions, no. 1, line 2, Cunningham, *Arch. Surv. Reports.*, Vol. III, p. 30.)

See Bhāgavadgītā, II, 46.

UDUMBARA—The threshold of a house, a door.

(1) Uchchhrāyāt pāda-vistīrṇā śākhā tad-vad udumbaraḥ—' the side-frame of the door has a breadth of ¼ of the altitude ; likewise the threshold.' Śākhā-dvaye'pi kāryaṁ sārdhaṁ tat syād udumbarayoḥ—' the thickness of the two side-frames of a door is as many digits (aṅgulas) as the altitude numbers cubits, one and a half that measure gives the thickness of the threshold and upper timber.'

(*Bṛihat-Saṁhitā*, LIII, 26 ; LVI, 13, Kern, *J.R.A.S.*, N. S., Vol. VI, pp. 284, 318.)

(2) Garbha-gṛiha-udumbara-pramāṇa—' measures of the central hall and the threshold'.—(*Prāsādamaṇḍana-Vāstu-śāstra* of Sūtra-dhāra Maṇḍaṇa, III, MSS., Egg. 3147, 2253 fol. 15*a*.)

(3) Plaksha-dvāraṁ bhavet pūrvaṁ yāmye chodumbaraṁ bhavet ।
The back-door should be at the east and the udumbara or front-door at the south'.—(*Matsya-Purāṇa*, Chap. CCLXIV, v. 15.)

Tathā dvi-guṇa-vistīrṇa-mukhas tad-vad udumbaraḥ ।

(*Ibid.*, Chap. CCLXX, v. 20.)

(4) Vistārād dvi-guṇaṁ dvāraṁ kartavyaṁ tu suśobhanam ।
Udumbarau tad-ūrddhvaṁ cha nyasech chhāśṇāṁ (?) sumaṅ galaiḥ ॥
Dvārasya tu chaturthāṁśe kāryau chaṇḍa-prachaṇḍakau ॥
Viśvak senāvat sadantau śikhārddhodumbara-śriyaṁ ॥

(*Agni-Purāṇa*, Chap. XLII, VV. 19–20.)

(5) *Bhavishya-Purāṇa* (Chap. CXXX, v. 20) has the same verse as (1) except that it reads 'udumbarī' in place of 'udumbaraḥ' in the *Bṛihat-Saṁhitā*.

(6) *See* jamb ornaments, Chalukyan Architecture, *Arch. Surv.*, New Imp. Series, Vol. XXI, plates CL, figs. 2, 3.

UDDHṚITA—A synonym of uttara or a crowning fillet.

(*M.*, XVI, 56–58, *see* under UTTARA.)

UDBHUTA—A kind of phallus.

(*M.*, LII, 226, 233, 236, 238, 241, *see* under LIṄGA.)

UDYĀNA (*cf.* ĀRĀMA)—A pleasure-garden.

(1) *Rāmāyaṇa* (Cock) II, 71, 21 :

Eshā nātipratītā me puṇyodyānā yaśasvinī ।
Ayodhyā dṛiśyate dūrāt . . . ॥

Ibid., 22–26 :

Udyānāni hi sāyāhne kṛīḍitvoparatair naraiḥ ॥
Samantād vipradhāvadbhiḥ prakāśante mamānyathā ।
Tānyadyānurudantīva parityaktāni kāmibhiḥ ॥
Araṇya-bhūteva purī sārathe pratibhāti mām ।
Nahyatra yānair dṛiśyante na gajair na cha vājibhiḥ ॥
Niryānto vābhiyānto vā nara-mukhyā yathā purā ।
Udyānāni purā bhānti matta-pramuditāni cha ॥
Janānāṁ rati-saṁyogeshvatyanta-guṇavanti cha ।
Tānyetānyadya paśyāmi nirānandāni sarvaśaḥ ॥

Ibid. II, 67, 19 :

Nārājake jana-pade vāhanaiḥ śīghra-vāhibhiḥ ।
Narā niryāntyaraṇyāni nāribhiḥ saha kāminaḥ ॥

(2) Līlodyāna or pramadodyāna—pleasure-garden, on the Dhārāgiri hill, the scene of the second Art.

(Dhar Praśasti of Arjunavarman, lines 6, 12, 31, verse 30, lines 36, 75, *Ep. Ind.*, Vol. VIII, pp. 99-100.)

UNMĀNA (*see* MĀNA)—The measurement of thickness or diameter.

(*M.*, LV, 3-9, *see* under MĀNA.)

Ataḥ-paraṁ pravakshyāmi mānonmānaṁ viśeshataḥ ।

(*Matsya-Purāṇa*, Chap. CCLVIII, v. 16.)

Mānaṁ tad-vistaraṁ proktaṁ unmānam nāham eva cha ॥
Pramāṇaṁ dīrgham ityuktaṁ mānonmāna-pramāṇataḥ ॥

(*Suprabhedāgama*, XXXIV, 35, 36.)

UPAKĀNTA—A class of the six-storeyed buildings.

(*M.*, XXIV, 16, *see* under PRĀSĀDA.)

UPATULĀ (*see* TULĀ)—A part of the column.

(*Bṛihat-Saṁhitā*, LIII, 30, *see* under TULĀ.)

UPATALPA—An upper storey, a room on the top of a house.

(*Raghu-vaṁśa*, XVI, 11, etc.)

UPADVĀRA—The smaller door.

(*See Mānasāra*, IX, 306, 309, 354, 360, under DVĀRA.)

Upadvāro(ramu)ktavat kuryād vishṇu-dhisṇaṁ tu paśchime ।

(*M.*, IX, 109.)

Chatur-dikshu chatur dvāram upadvāram antarālake ।

(*M.*, XXXI, 77.)

UPADHĀNA (*see* under ŚAYANA)—A pillow, an article of furniture.

UPAPADA—The upper or dwarf pillar which is subordinate to a larger column.

Upapādāni sarveshāṁ pūrva (? mūla)-pāde tu yojayet ।
Ekopapāda-saṁyuktaṁ dvi-try-upapādena saṁyutam ।
Vedopapāda-saṁyuktaṁ brahma-kāntam īritam ।

(*M.*, XV, 239, 242, 244, *see* also 245, 247.)

UPAPĪṬHA (*cf.* PĪṬHA)—The pedestal, the upper pedestal, the outer surface, a site-plan. The pedestal is the lowest division in an order of columns, called also stylobates and stereobates. It consists of three principal parts—the die, the cornice, and the base.

(1) 'The pedestal is not only placed under the base of a column or pilaster, but frequently employed, both singly and together with the

THE SITE PLANS

UPA-PĪTHA PLAN OF 25 PLOTS

MARUT	MUKHYA	SOMA	ADITI	ĪŚA
ŚOSHA	RUDRA	BHŪDHARA	APAVATSA	JAYANTA
VARUṆA	MITRA	BRAHMĀ	ĀRYAKA	ĀDITYA
SUGRĪVA	INDRA	VIVASVAT	SAVITRA	BHṚIŚA
PITṚI	BHRIṄGA-RĀJA	YAMA	VITATHA	AGNI

latter, as a pavement for temples and porticoes, over cornices of edifices consisting of several storeys in height, and also as a platform for thrones, and as seats for statues.'

In a Tamil fragment of a manuscript, purporting to be a translation of *Māyamata*, it is said that 'the height of the shaft or pillar is to be divided into four parts, and one to be given to the base which may or may not be accompanied by a pedestal, and in the case where a pedestal is joined to the base, the height of the pedestal may be either equal to that of the base, or twice, or three times as much. Here, the greatest height, given to a pedestal, namely, three times that of the base, is equal to a little more than a third part of the highest column, which is not perhaps a bad proportion.'

(Rām Rāz, *Ess. Arch. Hind.*, pp. 23, 26.)

(2) *Kāmikāgama*, XXXV :

Tad-varddhitopapīṭhaṁ vā tad-varddhita-masūrakam ॥ (115).
Adhishṭhānādi-shaḍ-vargaṁ tan-mānaṁ upapīṭhake ॥ (122).

(3) *Suprabhedāgama*, XXXI, 12 :

Pīṭhasya tri-guṇaṁ garbhaṁ ta(t)-tri-bhāgaika-bhittikam ।
Saṁvīkshya sama-bhūmiś ched upapīṭhaṁ prakalpayet ॥

(4) *Mānasāra* :

A site-plan in which the whole area is divided into 25 equal squares (*see* under PADAVINYĀSA) :

Pañchamaṁ pañcha-pañchāṁśam upapīṭham iti smṛitam ।
(*M.*, VII, 6.)
Evaṁ sūtra-sthitān devān padasthāṁś chopapīṭhake ।—(*ibid.*, 70.)

In connexion with foundations :

Ekāṁśaṁ koshṭha-bhittyuchchhra(ya)ṁ ghanaṁ prāg-uktavan-nayet ।
Upapīṭhaṁ pade devān koshṭhaṁ chokta-kramaṁ nyaset ।
(*M.*, XII, 38-39.)

In connexion with the 'pīṭa' or yoni part of the liṅga :

Athavā kumbha-dig-bhāgaṁ padma-tuṅga(ṁ) yugāṁśakam ।
Śeshaṁ prāg-ukta-vat kuryād upapīṭhaṁ prakalpayet ।

The pedestal of the column (*M.*, XIII, 2–156) :

Its situation :

Adhishṭhānonnate deśe chopapīṭham hi saṁsṛitam । (2)

Its heights (*cf. also Māyamata*, quoted above) :

Ete tattvam adhishṭhānaṁ tach-chatur-aṁśakaṁ ।
Vibhajet tvādimāṁśena ekaikāṁśaṁ vivardhanāt ।
Tad ashṭāṁśāvasānaṁ syāj janmādi-paṭṭikāntikam ।

Evaṁ tu chopapīṭhochchaṁ navabhir bhedam īritam ।
Athavā kshudra-harmye tu chatur-bhāgāṁśam unnatam ।
Dvi-bhāgaṁ vā tri-bhāgaṁ vā chatur-bhāgam athāpi vā ।
Pañcha-daśodayaṁ vāpi ri(śā)ntikādi-śarodayam ।

(3-9, *see also* 10-15, under UTSEDHA.)

The general description :

Bhāga-pādādi-sarveshām udgrīvaṁ vāstu-vaśān nyaset ।
Pādānām api sarveshāṁ patrajātibhir alaṅkṛitam ।
Antre nāṭakair yuktaṁ padmānāṁ tu dalair yutam ।
Chatur-aśrākṛitiṁ chaiva prathamādīn kampa-vājanaiḥ ।
Athavā ratna-pushapaś cha patrādyair alaṅkṛitam syāt ।
Anyair yuktaṁ svalaṅkṛitya prativājana-deśake ।
Prativājanakaṁ teshāṁ kṛite karkarīkṛitam ।
Anyena vāntaraṁ chaiva vyāla-siṁhādi-rūpakaiḥ ।
Khaḍgeva śroṇī-saṁyuktaṁ vṛittāśraṁ pushpakair yutam ।
Anyānyamuktaṁ cha sarveshāṁ yuktyā tatraiva yojayet । (145-154).

Sixteen types of pedestals are described under three technical names, details whereof are given below (37-127). (The mouldings are arranged in the successive order, as given in the text, from bottom upwards.)

I. Vedibhadra (lines 27-53) :

	Parts
(*a*) 24 parts :	
(1) Upāna (plinth)	5
(2) Kampa (fillet)	1
(3) Grīva (dado)	12
(4) Kampa (fillet)	1
(5) Vājana (fillet with greater projection) ..	4
(6) Kampa (fillet)	1
(*b*) 12 parts :	
(1) Janman (plinth)	2
(2) Padma (cyma)	1
(3) Kampa (fillet)	½
(4) Kaṇṭha (dado)	5
(5) Kshepaṇa (projection)	1½
(6) Padma (cyma)	1
(7) Paṭṭikā (fillet)	½
(8) Kampa (fillet)	½
(*c*) 12 parts :	
(1) Pāduka (plinth)	1½
(2) Abja (cyma)	1½
(3) Kampa (fillet)	½
(4) Grīva (dado)	5½

	Parts
(5) Kshepaṇa (projection)	½
(6) Padma (cyma)	½
(7) Vājana (fillet)	1
(8) Kampa (fillet)	½

(*d*) 12 parts :

(1) Upāna (plinth)	1
(2) Abja (cyma)	
(3) Kampa (fillet)	½
(4) Karṇa (ear)	
(5) Paṭṭika (fillet)	1
(6) Kandhara (dado)	5
(7) Kampa (fillet)	½
(8) Vājana (fillet)	2
(9) Kampa (fillet)	½

These are suitable for all kinds of buildings :

Sarva-harmyeshu yogaṁ syād vedibhadraṁ chaturvidham | (52)

II. Pratibhadra (lines 53–89) :

(*a*) 26 parts :

	Parts
(1) Janman (plinth)	3
(2) Kampa (fillet)	1
(3) Abja (cyma)	2
(4) Kampa (fillet)	1
(5) Grīva (dado)	11
(6) Kampa (fillet)	1
(7) Ambuja (cyma)	2
(8) Kampa (fillet)	3
(9) Antarita (fillet)	1
(10) Prati-vājana (cavetto)	1

(*b*) 32 parts :

(1) Janman (plinth)	2
(2) Kshepaṇa (projection)	½
(3) Padma (cyma)	2½
(4) Kshudrābja (small cyma)	½
(5) Kampa (fillet)	½
(6) Kandhara (dado)	2
(7) Kampa (fillet)	½
(8) Abja (cyma)	½
(9) Paṭṭika (fillet)	2
(10) Padma (cyma)	½

	Parts
(11) Kampa (fillet)	½
(12) Kandhara (dado)	10
(13) Kampa (fillet)	½
(14) Padma (cyma)	½
(15) Kampa (fillet)	½
(16) Kandhara (dado)	1
(17) Uttara (fillet)	1
(18) Kshepaṇa (projection)	½
(19) Ambuja (cyma)	½
(20) Kapota (corona)	3
(21) Āliṅga (fillet)	½
(22) Antarita (fillet)	1
(23) Prati-vājana (cavetto)	1½

(*c*) 33 parts :

(1) Janman (plinth)	3½
(2) Kampa (fillet)	½
(3) Padma (cyma)	3
(4) Kampa (fillet)	½
(5) Kandhara (dado)	½
(6) Kampa (fillet)	½
(7) Ambuja (cyma)	½
(8) Vajrakumbha (round pitcher)	2
(9) Dala (petal)	1½
(10) Gala (dado)	5
(11) Uttara (fillet)	2
(12) Ardha-kampa (half-fillet)	7
(13) Saroruha (cyma)	1
(14) Kapota (corona)	3
(15) Āliṅga (fillet)	½
(16) Antarita (fillet)	1
(17) Prati-vājana (cavetto)	1½

(*d*) 33 parts :

(1) Janman (plinth)	2½
(2) Kampa (fillet)	½
(3) Padma (cyma)	3
(4) Kampa (fillet)	½
(5) Karṇa (ear)	½
(6) Kampa (fillet)	½
(7) Ambuja (cyma)	½

	Parts
(8) Ratna-paṭṭa (jewelled fillet)	½
(9) Dala (petal)	½
(10) Kshepaṇa (projection)	½
(11) Karṇa (ear)	1
(12) Kshepaṇa (projection)	½
(13) Ambuja (cyma)	1
(14) Kshepaṇa (projection)	1½
(15) Kaṇṭha (dado)	11
(16) Uttara (fillet)	½
(17) Ardha-kampa (half-fillet)	½
(18) Ambuja (cyma)	2
(19) Kapota (corona)	1½
(20) Āliṅga (fillet)	1½
(21) Antarita (fillet)	1
(22) Prati-vājana (cavetto)	1
(23) Vājana (fillet)	1½

These are suitable for temples, buildings of the Brāhmaṇas, and palaces of kings (91).

III. Mañchabhadra (lines 90–124) :

(*a*) 30 parts :

	Parts
(1) Janman (plinth)	3
(2) Kampa (fillet)	½
(3) Mahāmbuja (large cyma)	3
(4) Kampa (fillet)	½
(5) Kaṇṭha (dado)	4½
(6) Kampa (fillet)	1½
(7) Ambuja (cyma)	1½
(8) Kapota (corona)	2½
(9) Prati-vājana (cavetto)	1
(10) Kaṇṭha (dado)	2
(11) Uttara (fillet)	1

and the remaining parts are distributed among the following members :

(12) Kshepaṇa (projection).
(13) Padma (cyma).
(14) Gopānaka (beam).
(15) Āliṅga (fillet).
(16) Antarita (fillet).
(17) Prati-vājana (cavetto).

(*b*) 31 parts :

	Parts
(1) Upāna (plinth)	3
(2) Kampa (fillet)	½
(3) Saroruha (cyma)	3½
(4) Kshepaṇa (projection)	1½
(5) Kampa (fillet)	½
(6) Karṇa (ear)	½
(7) Ambuja (cyma)	½
(8) Gopāna (beam)	2½
(9) Prati-vājana (cavetto)	3
(10) Gala (dado)	8
(11) Uttara (fillet)	1
(12) Kampa (fillet)	½
(13) Abja (cyma)	½
(14) Kapota (corona)	3
(15) Āliṅga (fillet)	½
(16) Antarita (fillet)	½
(17) Prati-vājana (cavetto)	1½

(*c*) 32 parts :

(1) Upāna (plinth)	2
(2) Kampa (fillet)	½
(3) Mahāmbuja (large cyma)	2½
(4) Kshudrābja (small cyma)	1½
(5) Kampa (fillet)	½
(6) Antarita (fillet)	2
(7) Kampa (fillet)	½
(8) Padma (cyma)	½
(9) Paṭṭika (fillet)	1
(10) Padma (cyma)	½
(11) Kampa (fillet)	½
(12) Gala (dado)	5
(13) Uttara (fillet)	½
(14) Kampa (fillet)	½
(15) Ambuja (cyma)	½
(16) Ardha-kampa (half-fillet)	½
(17) Prati-vājana (cavetto)	½
(18) Antarita (fillet)	½
(19) Karṇa (ear)	3
(20) Uttara (fillet)	1
(21) Kampa (fillet)	½
(22) Padma (cyma)	½

	Parts
(23) Kapota (corona)	3
(24) Āliṅga (fillet)	½
(25) Antarita (fillet)	½
(26) Gala (dado)	2
(27) Uttara (fillet)	1

(*d*) 34 parts :

(1) Janman (plinth)	3
(2) Kampa (fillet)	½
(3) Abja (cyma)	3½
(4) Kshudra-padma (small cyma)	½
(5) Kampa (fillet)	½
(6) Gala (dado)	7
(7) Antara (fillet)	1
(8) Kampa (fillet)	½
(9) Padma (cyma)	½
(10) Aṁśuka (filament)	2½
(11) Kapota (corona)	1½
(12) Antara (fillet)	6
(13) Karṇa (ear) and	
(14) Uttara (fillet)	1
(15) Kampa (fillet)	½
(16) Abja (cyma)	½
(17) Gopana (beam)	3
(18) Vājana (fillet)	2

Projections (lines 125–144) :

The projection of the plinth (and other members) is equal to the moulding, larger by one-fourth, one-half, three-fourths, or twice :

Tat-tad-aṅgāni sarveshām upānādi-tathākramam ।
Tat-samaṁ nirgamaṁ vāpi tat pādādhikam eva cha ।
Tad ardhādhika-bhāgaṁ vāpi tat-tri-bhāgādhikaṁ tataḥ ।
Tat-samādhikaṁ evaṁ vā pādād upāna-nirgamam । (128–131).
Janma-nirgamam evoktaṁ padma nirgamam ishyate । (138).

The projection of the cyma is not up to twice of it :

Tuṅgaṁ tat-samam evaṁ vā pādādhikyārdham adhikam ।
Pādona-dvi-guṇaṁ vāpi padmam evam tu nirgamaṁ । (139–140).
Upamānasya mānena yuktyā padmasya tu nirgamaṁ । (142).

The projections of the other mouldings are (generally) equal to them :

Kshudra-padmāni kampāni tat-samaṁ vātha nirgamam ।
Paṭṭikādīni sarvāṇi tat-samaṁ nirgamaṁ bhavet । (143–144).

The projection of the (whole) pedestal (lines 20–35):

The height of the pedestal is divided into 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, or 15 equal parts; of these 1, 2, 3, 4, 5, 6, 7 or 8 parts are projections (lines 20–26). But the choice of that proportion which would make it look beautiful is left to the discretion of the artist:

Pūrvaṁ nirgamaṁ proktaṁ yan-mānoramyam ānayet | (26).

The extent of projection:

Nirgamaṁ chopapīṭhaṁ(ṭhasya) syāt pāda-bāhyāvasānakam | (34).

These pedestals of the Indian architecture may be compared, in the following pages, with those of the early European orders, for a general knowledge of the subject.

(5) 'Whether the pedestal is to be considered a component part of an order is of little importance. There are so many cases that arise in designing a building, in which it cannot be dispensed with, that we think it useful to connect it with the column and entablature. Vitruvius, in the Doric, Corinthian and Tuscan orders, makes no mention of pedestals, and in the Ionic order he seems to consider them rather as a necessary part in the construction of a temple than as belonging to the order itself.'—(Gwilt, *Encycl.*, Art. 2601.)

'The height of the podium, or pedestal, with its cornice and base, from the level of the pulpitum, is one-twelfth part of the diameter of the orchestra (in a theatre). The columns on the podium, with their capitals and bases, are to be one-fourth of its diameter high. The architraves and cornices of those columns are one-fifth of their height. The upper pedestal, including the base and cornice, is half the height of the lower pedestal. The columns on this pedestal are one fourth less in height than the lower columns.'

'The architrave and its cornice are one-fifth of the columns. If there is to be a third order, the upper pedestal is to be half the height of that under the middle order and the architrave and cornice one-fifth of the columns.' (*Vitruvius*, Book V, Chap. VII.)

Tables showing the height of pedestals in ancient and modern works

	Plinth (base) in minutes	Mouldings above plinths	Die	Cornice		Total
Doric:						
Palladio ..	26	14	80	20	=	140
Scamozzi ..	30	15	$88\frac{4}{7}$	$22\frac{1}{2}$	=	$156\frac{1}{14}$

	Plinth (base) in minutes	Mouldings above plinths	Die	Cornice		Total
Ionic :						
Temple of Fortune Virilis ..	44	$19\frac{3}{4}$	$93\frac{3}{4}$	$23\frac{1}{4}$	=	$180\frac{3}{4}$
Coliseum ..	$33\frac{1}{4}$	$9\frac{1}{2}$	$81\frac{5}{6}$	17	=	$141\frac{7}{12}$
Palladio ..	$28\frac{2}{3}$	$14\frac{1}{3}$	$97\frac{3}{4}$	$21\frac{1}{2}$	=	$162\frac{1}{4}$
Scamozzi ..	30	15	$82\frac{1}{2}$	$22\frac{1}{2}$	=	150
Corinthian :						
Arch of Constantine ..	$17\frac{1}{2}$	29	153	$29\frac{1}{2}$	=	229
Coliseum ..	23	$11\frac{1}{2}$	78	$19\frac{1}{4}$	=	$131\frac{3}{4}$
Palladio ..	$23\frac{1}{2}$	$14\frac{1}{2}$	93	19	=	150
Scamozzi ..	30	15	$132\frac{1}{2}$	$22\frac{1}{2}$	=	200
Composite :						
Arch of Titus ..	55	30	141	29	=	255
Arch of the Goldsmiths ..	46	$25\frac{1}{4}$	$144\frac{1}{2}$	$25\frac{1}{4}$	=	241
Arch of Septimus Severus ..	30	$30\frac{5}{6}$	$140\frac{1}{2}$	$29\frac{5}{6}$	=	$231\frac{1}{6}$
Palladio ..	33	17	133	17	=	200
Scamozzi ..	30	15	$112\frac{1}{2}$	$22\frac{1}{2}$	=	180

' The minutes used in the above table are each equal to 1 60 of the diameter of the shaft.' (Gwilt, *Encycl.*, Art. 2600).

PEDESTALS

		Height in parts of a module	Projection from the axis of column in parts of a module
I. In the Tuscan order (Art. 2555) :			
Cornice cymatium, 6 parts	1. (Listel) ..	2	20
	2. Ogée ..	..	4
Die, 44 parts ..	3. Die or dado 3 modules ..	4	$16\frac{1}{2}$
	and		
	4. Congé or apophyge ..	2	$16\frac{1}{2}$
Base, 6 parts ..	5. Fillet ..	1	$18\frac{1}{2}$
	6. Plinth ..	5	$20\frac{1}{2}$

			Height in parts of a module	Projection from the axis of column in parts of a module
II. In the Doric order (Art. 2665) :				
Cornice, 6 parts ..	1.	Listel	½	23
	2.	Echinus	1	22¾
	3.	Fillet	½	21¾
	4.	Corona	2½	21
	5.	Cyma reversa ..	1½	18½
Die	6.	Die, 4 modules.		
Base	7.	Congé	1	17
	8.	Fillet	1	18
	9.	Astragal	1	18¾
	10.	Cyma (inverted) ..	2	19
	11.	Second plinth ..	2½	21
	12.	First plinth ..	4	21½
III. In the Ionic order :				
Cornice, 11¾ parts	1.	Fillet	⅔	35
	2.	Cyma reversa ..	1⅓	34¾
	3.	Corona	3	33½
	4.	Fillet of the drip ..	½	30
	5.	Ovolo	3	29½
	6.	Bead	1	27
	7.	Fillet	1	26¼
	8.	Congé	1¼	25
Die (4 modus) ..	9.	Die	12¾	1 mod. 7
Base, 10 parts ..	10.	Congé	2	25
	11.	Fillet	1	27
	12.	Bead	1⅓	28
	13.	Cyma reversa ..	3	27½
	14.	Fillet	⅔	31⅔
	15.	Plinth	4	33
IV. In the Corinthian order (Art. 2582) :				
Cornice, 14¼ parts	1.	Fillet	⅔	33½
	2.	Cyma reversa ..	1⅓	33¼
	3.	Corona	3	32
	4.	Throat	1¼	30¾
	5.	Bead	1	26½
	6.	Fillet	¾	25¾
	7.	Frieze	5	25
	8.	Bead	1¼	26⅞

			Height in parts of a module	Projection from the axis of column in parts of a module
Die, 91½ parts	9.	Fillet	¾	26¼
	10.	Congé	1½	25
	11.	Die	87¼	25
	12.	Fillet	1½	25
	13.	Congé	¾	26¼
Base, 14¼ parts	14.	Bead	1¼	27¼
	15.	Inverted cyma reversa	3	26⅝
	16.	Fillet	1	30¾
	17.	Torus	3	32½
	18.	Plinth	6	32½

V. In the Composite order (Art. 2591) :

Cornice, 14 parts	1.	Fillet	⅔	33
	2.	Cyma reversa ..	1⅓	32¾
	3.	Corona	3	31½
	4.	Cyma recta ..	1⅓	28½
	5.	Fillet	½	26¼
	6.	Cavetto	1	25¼
	7.	Frieze	5	25
	8.	Bead	1	27
Die, 94 parts	9.	Fillet	1	27¼
	10.	Congé	1¼	25
	11.	Die	88¾	25
	12.	Apophyge	2	27
	13.	Fillet	1	27
	14.	Bead	1	27¾
	15.	Inverted cyma reversa	3	30¼
	16.	Fillet	1	31¼
	17.	Torus	3	33
	18.	Plinth	4	33

On the comparison of the pedestals employed in the early periods of Indian and European architecture, Rām Rāz and others are of opinion that 'the most finished specimens of them (Indian pedestals) may be justly said to surpass anything of the kind in the Grecian or Roman orders, both in the beauty of their proportions and the richness of their ornament.'—(Rām Rāz, p. 23.)

(6) *See* Raṅganātha inscription of Sundarapāṇḍya.—(Verse 19, *Ep. Ind.*, Vol. III, pp. 13, 16.)

The ends of the ring (of the Konkadara plates of Allava-Dodda) are secured in the crescent-shaped base of an oblong *pedestal* which bears a recumbent figure of the sacred bull Nandin, with the symbols of the sun and the moon in front of it.—(*Ep. Ind.*, Vol. v, p. 53.)

(7) 'One lower pedestal (upapīṭha), on which this image stood, set with jewels (and measuring) one muṛam and eleven viral in length, three-quarters (of a muṛam) and five viral in breadth, and seven viral in height.'—(Inscription of Rajaraja, no. 34, para. 6, *H.S.I.I.*, Vol. II, p. 144.)

(8) 'One pedestal (having or called) an auspicious mark (bhadra). "The word, bhadra, occurs in two other inscriptions in the description of a pedestal (above, p. 223, para. 4; p. 225, para. 4).'—(*V.S.I.I.*, Vol. II, no. 79, para. 4, p. 398, note 2.)

(9) See *Essay on Arch. of Hind.*, Rām Rāz, Plate I, figs. 1–12.

(10) *See* pedestal of statue inside the great temple at Gaya, Cunningham, *Arch. Surv. Reports*, Vol. I, Plate v, p. 6, *ibid.*, Vol, IX, Plate III (plan and section of pedestal for statues).

UPABHAVANA—A sub-temple.

'Caused to be erected a sub-temple (upabhavana) adorned with the images of Hari and Ganeśa'.—(*Ep. Carnat.*, Vol. v, Part I, Arsikere Taluq no. 79, Transl., p. 142, last two lines.)

UPAMĀNA—The measurement of the interspace.

(*M.*, LV, 3, 9, *see* under MĀNA.)

UPALEPANA—Plastering.

Tad-vasati-saṁbandhi-nava-karmmottara-bhāvi-khaṇḍa-sphuṭita-sam-mārjjanopalepana-paripālanādi ।—(Konnur Inscrip. of Amoghavarsha I, line 37, *Ep. Ind.*, Vol. VI, pp. 31, 36.)

Deva-gṛihaṁ karāpya punas tasya upalepana ।—(Buchkalā Inscrip. of Nāga Bhaṭṭa, lines 17–18, *Ep. Ind.*, Vol. IX, p. 200.)

UPAVANA—A pleasure-garden, a planted forest.

Upavanam atha chakre tena megheśvarasya sphurita-kusumareṇu-śreṇi-chandrātapa-śrī ।

Avirata-makaranda-syanda-sandoha-varshair ddhṛita-rati-pati-līlāyan-tradhārāgṛihatvam ॥—(Two Bhuvaneśvar Inscriptions, no. A of Svapneśvara, v. 26, *Ep. Ind.*, Vol. VI, p. 202.)

UPAVĀSANA—A coverlet, an upper garment.

UPAVEDI—The upper or the smaller pedestal, a seat or dâis.

Śuddha-toyena saṁpūrya vedikopari vinyaset ।

Upavedyopari sthāpya choktavach chāshṭa-maṅgalam ।

(*M.*, LXX, 41, 45.)

UPASATHĀGĀRA—A building belonging to a Buddhist monastery used for the performance of the priestly ceremony of confession, in which every member of the order is to acknowledge the faults he has committed.—(Childer's *S. V.*, Kern, quoted by W. Geiger: Mahavaṁśa, p. 296.)

UPASTHĀNA (*cf.* Āsthāna-maṇḍapa)—A reception-room.

'The meritorious gift of a reception-room (upasthāna) by the two men'—(Junnar Inscriptions, no. 2, *Arch. Surv.*, New Imp. Series, Vol. IV, p. 92.)

UPASTHĀNA-BHŪMI—A hall of audience.

Yasyopasthāna-bhūmi . . . 'whose hall of audience.'—(Kahaun Stone Pillar Inscrip. of Skandagupta, line 1, *C. I. I.*, Vol. III, *F. G. I.*, no. 15, p. 67.)

UPĀNA—A rectangular moulding, a fillet; it corresponds, in the import of the term and the purpose to which it is applied, to the plinth or the lower square member of the base of a column or the projecting base of any moulding (*cf.* Rām Rāz, *Ess. Arch. Hind.*, p. 25).

Atha vakshyāmi saṁkshepāt pāda-mānaṁ yathā-vidhi ।
Uttaropānah(-y)or madhya-gatam etat prakīrtitam ॥
Apparently 'upānaha' is used in the sense of 'upāna.'

(*Vāstu-vidyā*, ed. Ganapati Śāstri, IX, 1.)

The bottom of the foundation-pit:

Tat-pāda-mūle deśe vā tathopāna-pradeśake ।
Kuḍya-stambhe gṛiha-stambhe harmya-garbhaṁ vinikshipet ।

(*M.*, XII, 130–131.)

The moulding (plinth) at the bottom of a pedestal, it is also called *Janman*:

Utesedhe tu chatur-viṁśat pañchāṁśam upānam īritam ।
Ekena kampam ityuktaṁ grīvochchaṁ dvā-daśāṁśakam ।
Kampam ekaṁ tu vedāṁśaṁ vājanaṁ kampam aṁśakam ।
Vedibhadram iti proktam athavā dvā-daśāṁśakam ।
Janma dvayāṁśakaṁ padaṁ kampam ardhena kārayet ।

(*M.*, XIII, 36–40, *see* the lists of mouldings under UPAPĪṬHA.)

The similar moulding of the base is also called 'janman':

Eka-viṁśāṁśakaṁ tuṅge kshudropānaṁ śivāṁśakam ।
Janmādi-vājanāntaṁ cha sapta-viṁśaṁśam uchchhrayet ।
Dvi-bhāgaṁ janma-tuṅgaṁ syāt tat-samaṁ chāmbujodayam ।

(*M.*, XIV, 44, 65–66.)

It is also called *pāduka* and *vapra*, *see* the lists of mouldings under ADHISHṬHĀNA.

UBHAYA-CHAṆḌITA—A site plan of one hundred and sixty-nine square plots.

(*M.* VII, 15–16, *cf.* PADA-VINYĀSA.)

URAGA-BANDHA (*See* under ADHISHṬHĀNA)—A class of bases. It has four types differing from one another in the height and number of the mouldings. (*See* the details under ADHISHṬHĀNA.)

It is shaped like the face of a snake (*uraga*) and is furnished with two *pratis* at the top (*M.*, XIV, 44). The pitcher-shaped moulding of this class of bases is circular or round.—(*M.*, XIV, 45.)

USHṆĪSHA—The top of a building, a diadem, a crownet, the top knot on the Buddha's head.

(1) *Mānasāra :*

The top of a building :

Śālāvṛite śālākūṭe cha nīḍe cha śikhare chordhva-kūṭake ।
Lupā-yukta-bhramākāre tat-tad-ushṇīsha-deśike ।
. . . Stūpikāvāhanaṁ bhavet ।

(*M.*, XVIII, 333–334.)

The top knot on the crown of a Buddhist image :

Bauddhasya lakshaṇaṁ vakshye samyak cha vidhinādhunā ।
Dvi-bhujaṁ cha dvi-netraṁ cha choshṇīshojjvala-maulikam ।

(*M.*, LVI, 1, 10.)

The crown of the statue of a devotee (*bhakta*) :

Ushṇīshāt pāda-paryantaṁ bhāvottara-śatāṁśakam ।
Ushṇīshaṁ tu chatur-mātraṁ netrāntaṁ tu yugāṅgulam ।

(*M.*, LIX, 14–15.)

Referring to the situation of the plumb-lines :

Ushṇīsha-madhyame chaiva lalāṭaṁ(sya) chaiva madhyame ।
Ushṇīshāt tu yathā pārśve lalāṭasya tu pārśvake ।
Ushṇīshāt pūrva-pārśve tu yathoktaṁ netra-madhyame ।

(*M.*, LXVII, 98, 103, 107.)

(2) The word 'ushṇīsha' usually means a turban, but is used by the Buddhists as a technical term for the top knot on Buddha's head, by which all figures of him are distinguished : 'he is never represented in Indian sculpture with any sort of covering on his head.' Dr. Burgess.—(*Ind. Ant.*, Vol. IX, p. 195, note 3.)

USHṆĪSHĪ—A type of round buildings.

(1) *Agni-Purāṇa*, Chap. CIV, VV. 17–18 (*see* under PRĀSĀDA).
(2) *Garuḍa-Purāṇa*, Chap. XLVII, VV. 21, 23, 28–29 (*see* under PRĀSĀDA).

USHṆISHA

Ū

ŪHĀPOHA—Philosophically 'uha' implies a conjecture, a guess, 'a hypothetical reasoning which helps the right recognition,' hence architecturally an additional moulding or member to fill up any unspecified gap; 'apoha' or 'pratyūha' means 'a removal,' hence leaving out a moulding, or an architectural member to complete a structure. Thus the former implies the addition and the latter the omission of a moulding.

(1) *Mānasāra*:

In connexion with the ground-plan:

Ajñānād aṅga-hīnaṁ cha kartā chaiva vinaśyati।
Tasmāt tu śilpibhiḥ prājñair ūhāpohān na yojayet।

(*M.*, VII, 268–269.)

Referring to two-storeyed buildings:

Sarveshāṁ devatā-harmye pūrvavad devatāḥ nyaset।
Ukta-vach chhāstra-mārgeṇa ūhāpohena yojayet।

(*M.*, XX, 105–106.)

In connexion with penalties for defects in important members:

Uhāpohādi-kīrtibhyāṁ śāstrokte tu yad(th)ā tathā।
Uhi(ūha)-hīnā chokta-hīnā tvadhikartṛi(tā) vinaśyati।
Tasmāt tu śilpa-vidvadbhiḥ parigrahoktavat kuru।

(*M.*, LXIX, 66–68.

(2) *Kāmikāgama, XLI*:

Sabhāvad vihitā bāhye prāsādavad alaṅkṛitā।
Ūha-pratyūha-samyuktā yā sabhā sā cha mālikā॥ (3).
Antara-prastaropetaṁ ūhā-pratyūhā-saṁyutam॥ (13).

Ibid, XLI:

Ūha-pratyūha-saṁyuktaṁ yathā-yukti yathā-ruchi॥ (37).

(3) *Suprabhedāgama, XXXI*, 71:

A quadrangular moulding of an arch:

Vṛitter ūrdhve u(ū)hāṁ kṛitvā chatur-āyatam eva tu॥

(For the context, *see* vv. 68–70, under TORAṆA.)

(4) *Mahābhārata*, 1, 3, 133:

Nāgalokam . . . aneka-vidha-prāsāda-harmya-valabhī-niryūha-śata-saṁkulam।

ŪRDHVA-DHĀRAṆA—A kind of phallus and pedestal combined.

In connexion with the phallus :

Berasyaika-śilā proktaṁ liṅgānāṁ tach-chatuḥ-śilā ।
Nandyāvarta(ā)-kṛitih sthāpyā tathā chaikāśmanā bhavet ।
Atho(dhaḥ) pāshāṇa-kurmākhyaṁ chordhva-dhāraṇam iti smṛitam । (*M.*, LII, 176–178.)

ŪRDHVA-ŚĀLĀ (*see* ŚĀLĀ)—The upper room or hall.

Referring to two-storeyed buildings :

Nānā-gopāna-saṁyuktaṁ kshudra-nāsyair vibhūsitam ।
Ardha-śālā-viśesho'sti chordhva-śālā-samanvitam ।
(*M.*, XX, 66–67, etc.)

ŪVARAKA—A kind of room, an inner room, a store room, an apartment.

Rāmadattasya deya-dhamāś cha bhikshu-gṛihaṁ uyarakaś cha-bharyāyāḥ sa velidattāyā deyadharma uyarakaḥ ।

A dwelling for the ascetics and an uyaraka (has) been dedicated as a charitable gift by Rāmadatta . . . and an uyaraka (has been given) as a charitable gift by his wife Velidata (Velidatta), whose husband is alive.

' Uyaraka apparently corresponds with *ūvaraka* of Nāsik no. 24. Transactions of Congr. 1874, p. 347, which Professor Bhāndārkar renders by *apartment*. Childers' *Pali Dict.* gives *ovaraka* with the meaning of *inner or store room* and this explanation fits here also very well.'—Prof. H. Jacobi.—(*Ind. Ant.*, Vol. VII, Kuḍā inscriptions, no. 8, p. 256.)

ṚI

ṚIKSHA-NĀYAKA (*see* SIṀHA)—A kind of round buildings.
(*Agni-Purāṇa*, Chap. CIV, vv. 19–20, *see* under PRĀSĀDA.)

E

EKA-TALA(-BHŪMI) (*see* under PRĀSĀDA)—A single-storey building, the ground floor.

Āhatyam (vibhajya) ashṭadhā harmyaṁ gaṇya-mānam ihochyate ।
Utsedhe chāshṭa-bhāge tu chāṁśena masūrakam ।
Dvi-bhāgaṁ chāṅghrikottuṅgaṁ mañcham ekena kārayet ।
Kandharaṁ tat-samaṁ kuryāt tad-dvayaṁ śikharodayam ।
Tad-ardhaṁ stupikottuṅgaṁ vaktraṁ shaḍ-vidham īritam ।
(*M.*, XIX, 20–24.)

Athavā manu-bhāgaṁ tu harmya-tuṅga(ṁ) vibhājite ।
Sa-tri-pādam adhishṭhānaṁ tad-dvayaṁ chāṅghri-bhājite(-konnatam) ।
Tad-ardhaṁ prastarotsedhaṁ yugāṁśaṁ grīva-tuṅgakam ।
Tad-ardhaṁ śikharottuṅgaṁ tad-ūrdhve stupikāṁśakam ।
Grīva-mañchordhvam aṁśena yatheshṭādhishṭhāna-saṁyutam ।
Ūrdhve pādodaye bandhaṁ(=4)bhāgam ekāṁsa(ṁ)-vedikam।
Śeshaṁ purvavat kuryād ashṭa-varga-vido viduḥ ।—(*Ibid.*, 80-86.)
Evaṁ proktaṁ harmyake madhya-bhadram ।
Śālā-koshṭhaṁ dig-vidike kūṭa-yuktam ।
Hārā-śrāntā-nāsikā-pañjarāḍhyam ।
Kuryāt sarvaṁ vedikā-bhadra-yuktam ।
Harmya-tāra-samaṁ chatur-aśrakaṁ tat-tri-pādam ardham athāpi cha ।
Kuḍya-tāra-samādi (?) yathā-kramam ।
Kanyasaṁ tri-vidhaṁ mukha-maṇḍapam ।
Tan-mukha-maṇḍapaṁ mukhya-vimāne ।
Madhya-vimānasya maṇḍapa-pārśve ।
Ambaraṁ daṇḍam atha dvayam ।
Harmya-vaśād upaveśana-yuktam ।
Yat tat kshudra-vimāne tan-mukhe maṇḍapam syāt ।—(*Ibid.* 192-203.)
Anya-maṇḍapa-deśe yan-mānoramyam alaṅkṛitam ।
Maṇḍape prastarasyordhve karṇa-harmyādi-maṇḍitam ।
Yat tan nāmāntarālaṁ chordhve nāsikā jāla-pañjaraṁ vāpi ।
Tat-tan-maṇḍapa-madhye prāsāda-vaśād dvāra(ṁ)-saṁkalpyam ।
Pūrvavat kavāṭa-yuktaṁ maṇḍapasyāntaḥ sa-kīla-yuktam ।

(*Ibid.*, 213-217.)

Eka-bhūmiṁ kuryād adhikaṁ chopapīṭha(ṁ) ruchirārtha(ṁ)-saṁ-yutam ।
Sopapīṭha-bhavanair yutaṁ tu vā kārayet tu kathitaṁ purātanaiḥ ।
Evaṁ sarva-harmyālaṅkāra-yuktyā nānā-pādair vedikā-tāra-mañcham (kuryāt) ।—(*Ibid.*, 258-261.)

EKATĀLA (*see* under TĀLA)—A kind of sculptural measurement.

EKA-PAKSHA (*cf.* DVIPAKṢHA)—One side, a road or wall having the footpath on one side only.

Antar-vīthī chaika-pakshaṁ bāhya-vīthī dvi-pakshakam ।

(*M.*, IX, 396.)

Anyat sālaṁ tu sarveshāṁ chaika-pakshālaya-kramāt ।
Anyat sālaṁ tu sārveshām ālayārthaṁ dvi-pakshakam ।

(*M.*, XXXVI, 86-87.)

See also M., IX, 351-354, 465, under DVI-PAKSHA.

EKA-LIṄGA—The single phallus as opposed to phalli in group.

Sarveshāṁ chaika-harmye tu ekaika-liṅge tu saṁmatam ।
Bahudhā sarva-lingeshu tat-tri-karṇaṁ na kārayet ।
Dvi-karṇaṁ bahu-liṅge tu tri-karṇaṁ-chaika-liṅgake ।
Evaṁ tu chaika-liṅgaṁ syād vistāraṁ parikīrtitam ।

(*M.*, LII, 71-73, 82.)

EKA-ŚĀLĀ—Mansion consisting of one row of buildings.

(*M.*, XXXV, 9, 35.)

EKA-HĀRĀ (*cf.* HĀRĀ)—With one chain-like ornament below the neck of the column, head or astragal.

In connexion with a single-storeyed building :

Śālā-kūṭa-dvayor madhye chaika-hārā sapañjaram ।—(*M.*, XIX, 57.)

EKĀDAŚA-TALA—An eleven-storeyed building, the eleventh storey.

Tad-adhastāt talaṁ chaika-daśa-dvā-daśa-bhūmikam ।

(*Kāmikāgama*, XXXV, 86.)

Śesha-bhāgaṁ tu sarveshāṁ yuktyā tatraiva yojayet ।
Evaṁ vistāra-gaṇyaṁ syāt tuṅga-gaṇyam ihochyate ।
Janmādi-stūpi-paryantaṁ uktavat saṁgrahaṁ viduḥ ।
Eka daśāṁśa-bhāgena daśa-talodayādhikam ।
Tad eva sārdha-bandh(v)aṁśaṁ masūrakottuṇgam ishyate ।
Saptāṁsaṁ pāda-dīrghaṁ syāt tad-ardaṁ prastarodayam ।
Śesheṁ prāg-uktavad gaṇyam ekā daśa-talodaye ।
Talordhvordhva-tale sarve karṇa-harmyādi-maṇḍitam ।
Eka-bhāga-dvi-bhāgaṁ vā parito'lindam ishyate ।
Nānādhishṭhāna-saṁyuktaṁ nānā-pādair alaṅkṛitam ।
Śālā-kūṭaiś cha uktavat samalaṅkṛitam ।
Hārāntare kūṭa-śālā cha grīva-deśokta-devatān(ḥ) ।
Anu-śālāshṭa-dik-pālās tat-tad-vāhana-saṁyutam ।
Yaksha-vidyādharādīnāṁ garuḍādīni vinyaset ।
Gaṇetyādi gaṇaiś chaiva sarva-harmyeshu nikshipet ।

(*M.*, XXIX, 35-49.)

ETAKA-PADAKA-PĪṬHA—A chair raised on a pedestal.

(*Mahāvagga*, V, 10, 2.)

EVAṀKĀNTA—A column connected with one, two or three minor pillars, and having a lotus-shaped base.

Ekopapāda-saṁyukt·ṁ dvi-try-upapādena saṁyutam ।
Evaṁ-kāntam iti proktaṁ mūle padmāsanānvitam ।

(*M.*, XV, 242-243.)

AI

AIRĀVATA—The great elephant, the riding animal (vāhana) of the god Īśa (? Indra).

Īśa-mūrtim iti dhyātvā rakta-varṇam cha śīshpatam (Śachipatim) ।
Dvi-bhujaṁ dvi-netraṁ cha rathairāvata-vāhanam ।

(*M.*, VII, 190–191.)

A class of the five-storeyed buildings.

(*M.*, XXIII, 3–12, *see* under PRĀSĀDA.)

K

KAKSHA—The armpit of an image, a residential room.

Kakshayor antaraṁ tāraṁ viṁśa-mātraṁ praśasyate ।

(*M.*, LIX, 29.)

Eka-viṁśāṅgulaṁ chordhve kakshayor antara-sthale ।

(*M.*, LXV, 52, etc.)

KAKSHA-BANDHA—A class of bases.

See the four types, the component mouldings and other details under ADHISHṬHĀNA.—(*M.*, XIV, 320–358.)

KAṬA—A mat of split cane or bamboo.

(*Taitt. Sam.*, V, 3, 12, 2 : *Śat. Brā.*, XIII, 3, 1, 3.)

KAṬAKA—An architectural ornament (like a ring) of a base, a bracelet for an image, camp, capital.

Madhye paṭṭair viśeshaṁ tu pushpa-ratnaiś cha śobhitam ।
Kaṭakāvṛitam eva vā śuddha-vṛittam athāpi vā ।—(*M.*, XIV, 75–76.)

Compare also the list of mouldings under ADHISHṬHĀNA.

Vṛittaṁ vidhiṁ tri-paṭṭaṁ vā dhārāya-kaṭakānvitam ।—(*Ibid.*, 238.)
Etat tu chitra-kalpaṁ (=an ornament) tu nāṭākābhi(kai)r alaṅkṛitam ।—(*M.*, L, 11.)
Keyūra-kaṭakair yuktaṁ prakoshṭha-valayaṁ tathā ।—(*M.*, LIV, 13.

See also M. LI, 57, udder KAṬI-SŪTRA.

In connexion with the plumb lines :

Śaktīnāṁ pushpa-hastaṁ tu stanāntaṁ kaṭakāgrakam ।
Tad-aṅgushṭhāvasānāntaṁ cha dvyantaraṁ chatur-aṅgulam ।

(*M.*, LXVII, 135–136.)

'One pair of bracelets (kaṭaka) for the arms of the goddess (consisting of) fifty-six karānju, two manjādi and (one) kunri of gold.'—(Inscriptions of Rajaraja, no. 2, line 37, *H.S.I.I.*, Vol. II, p. 19.)

'One pair of bracelets (kaṭaka) for the arms of the goddess, consisting of thirty-nine karānju and seven manjādi of gold.'—(Inscriptions of Rajendra-Chola, no. 8, line 19, *H. S. I. I.*, Vol. II, p. 89.)

Astyuttara-giri kaṭake (declivity of the Northern Mountain) Vijaya-puram-nāmā ṇripa-dhānī।—(Grant of Jayaditya of Vijaya-pura, line 6, *Ind. Ant.*, Vol. XXI, p. 170.)

'In the world-renowned Raya-chalukya's camp (or capital, kaṭaka), the bodyguard Kcṭa-nāyaka gained unlimited fame and the greatest reputation for energy and readiness.'—(*Ep. Carnat.*, Vol. V, Part I, Channarayapatna Taluq, no. 210; Transl., p. 216, line 9 of no. 210.)

KAṬAKĀKĀRA—An ornament shaped like a bracelet or ring.

Referring to lupā or a pent-roof:

Evaṁ cha lakshaṇaṁ proktaṁ kaṭakākāram tu yojayet।

(*M.*, XVIII, 249.)

KAṬI—The hip-part of a building, the hip of an image, a flight of steps.

(1) Yo vistāro bhaved yasya dvi-guṇā-tat-samunnatiḥ।
Uchchhrayād yas trītiyo'ṁśas tena tulyā kaṭir bhavet।

'The height of a building should be twice its width and its kaṭi (*lit.* hip) should be (equal to) ⅓ of its height.'—(*Bṛihat-Saṁhita*, LVI, 11.)

Dr. Kern translates 'kaṭi' by 'the flight of steps' (*J.R.A.S.*, N. S., Vol. VI, p. 318); but in this sense the word never occurs in dictionaries or literature; nor does this rendering suit the context here, first, because the description concerns a single-storeyed building, where the flight of steps, if there be any at the entrance, would not be usually one-third of the height of the whole building; secondly, the measures of the flight of steps mostly in buildings of more than one storey are never considered in any architectural treatises as being dependent on the height of the building or the storey.

(2) Chatuḥ-shashṭi-padaṁ kṛitvā madhye dvāraṁ prakalpayet।
Vistārād dvi-guṇochhrāyaṁ tat-tri-bhāgaḥ kaṭir bhavet॥

(*Matsya-Purāṇa*, Chap. CCLXX, v, 18.)

(3) *Bhavishya-Purāṇa* (Chap. CXX, v. 18) has the same verse as (1), except 'tasya' in place of 'yasya' in the first line, and 'atha' for 'aṁsa' in the second line. *Bṛihat-Saṁhita* seems to have improved the lines.

(4) In the sense of the hip or buttocks :

Kaṭi(ś) chorū-viśālaṁ syān madhya-kāñchina-lambavat ।

(*M.*, LIV, 91.)

Kaṭi-tāraṁ bhāskarāṁśam syād ashṭāṁśaṁ choru-vistṛitam ।
Mukhaṁ vakshaś cha kukshiś cha kaṭi-dīrghe dvādaśāṁśakam ।

(*M.*, LVII, 32, 55.)

Viṁśāṁśam cha kaṭi-tāram ūrdhve śroṇi-viśālakam ।—(*M.*, LXV, 48.)

KAṬI-SŪTRA—The (plumb) line by the hip or buttocks, a girdle.

Kaṭi-sūtrāvasānaṁ syāt pura-sūtram iti smṛitam ।
Kaṭi-sūtraṁ tu saṁyuktaṁ kaṭi-prānte sa-paṭṭikā ।—(*M.*, L, 21, 27.)
Tasmāt kaṭi-sūtrāntaṁ sapta-viṁśāṅgulaṁ bhavet ।
Trayodaśāṁśakaṁ chaiva kaṭi-sūtram tu vistṛitam ।

(*M.*, LXV, 150, 164.)

A girdle.

Kaṭakaṁ kaṭi-sūtraṁ cha keyūraṁ ratna-pūritam ।—(*M.*, LI, 57.)

KAṆTHA—Also called 'gala,' 'griva,' 'kandhara,' meaning literally the neck or throat. This is a quadrangular moulding, sometimes square and sometimes rectangular. 'When employed in pedestals (*see* the lists of mouldings under UPAPĪṬHA), it is made very high and it resembles the dado (or the portion of a pedestal between its base and cornice, also applied to the lower portions of the walls). But everywhere else it serves as a neutral member from which the proection of the rest of the mouldings are generally measured.'

(Rām Rāz, *Ess. Arch. Hind.*, p. 25.)

The neck of a column (*Suprabhedāgama*, XXXI, 58, *see* under STAMBHA).

Tuṅge triṁśati-bhāgena . . . ।
Tad-ūrdhve kaṇṭhaṁ ashṭāṁśam . . . ।—(*M.*, XIII, 90, 94.)
Utsedhe tu chatur-viṁśat . . . ।
Grīvochchaṁ dvā-daśāṁśakam ।—(*Ibid.*, 36-37.)
Tad-evāṁśena . . .
Pañchāṁśa(ṁ) kandharaṁ proktaṁ . . .—(*Ibid.*, 48, 50.)
Tad-evāṁśa (of 30 parts) . . .
Tad-ūrdhve galam ashṭāṁśam . . .—(*Ibid.*, 97, 101.)

For further examples, *see* the lists of mouldings under UPAPĪṬHA.

Gala-tuṅgaṁ yugāṅgulam ।
Gala-tāraṁ sārdham ashṭāṁśam . . . ।—(*M.*, LIX, 71, 81.)

For further examples, *see* the lists of limbs under TĀLA-MĀNA.

KAḌAṄGA—A large trench, a ditch, a boundary mark.

'Kaḍaṅgas or war-trenches are described in the Rev. G. Ritcher's *Manual of Coorg* (pp. 190–191) : these are enormous trenches defended by a bank of the excavated soil, and stretch over hills, woods, and comparatively flat countries, for miles and miles, at some place branching off in various directions, or encircling hilltops. Mr. Ritcher quotes old records to show that they were constructed by ancient Rājās to fortify the principality. In South Kanara also these trenches abound.'

'So, too, great and massive walls, 8 feet high, half as thick, and extending for long distances, are found buried in deep forest on the crest of the ghats between Kanara and Maisur, with large trees rooted in them.' (*See* CRĀMA and compare the above with the surrounding defensive ditches of the village as given in the *Mānasāra*.)

(*Ind. Ant.*, Vol. IV, p. 162, c. I., last para. line 2 f. ; c. 2, line 6.)

'From this it appears to follow that the Coorg Kaḍaṅgas or large trenches, originally were intended for landmarks.'—(Three Kongu inscriptions, no. II, *Ind. Ant.*, Vol. VI, p. 103, c. I, line 29, Transl. and footnote, last para.)

KANDARA-GṚIHA (*see* DARI-GṚIHA)—A cave-house.

Khyātaṁ (? syātaṁ) kanakādi-kandaragṛihodīrṇa-pratāpaṁ divi khyātaṁ naikavaṇig-viśāla-bibhavo bhūtābhiśobhaṁ śubham ।

(Description of the town of Āṭapura, Āṭpur inscrip. of Śaktikumāra, V, II, *Ind. Ant.*, Vol. XXXIX, pp. 191, note 25, 187.)

KANDHARA—The neck, the dado.

See KAṆṬHA and compare the lists of mouldings under UPAPĪṬHA.

KANYĀ—A girl, a virgin, the name of a month, the lower part of an architectural object.

Lupāṁ prāg-ukta-vistāraṁ tat-tad-vaṁśāṅghri-kāntakam ।
Adho(aḥ)-pādasya lupādyaiś cha tatra dosho na vidyate ।
Karṇāt kanyāvasānaṁ syān nava-sūtr ṁ prasārayet ।

(*M.*, XVIII, 231–233.)

KAPĀṬA (*see* KAVĀṬA)—A door, the panel of a door.

Kapāṭa-toraṇa-vatīm suvibhakāntarāpaṇām ।—(*Rāmāyaṇa*, I, 5, 10.)
Dṛiḍha-baddha- kapāṭāni mahāparighavanti cha ।—(*Ibid.*, VI, 3, 11.)

KAPOTA—A pigeon, a section of circular moulding made in the form of a pigeon's head, from which it takes it name. It is a crowning

member of bases, pedestals, and entablatures. Compare the lists of mouldings, from the *Mānasāra*, given under UPAPĪṬHA (where Kapota occurs eight times), ADHISṬHĀNA (fifteen times), and PRASTARA (five times) and also *see* Gwilt (*Encycl. of Arch.*, Art. 2532, 2555, pp. 806, 813–814). When employed in the entablature, it serves the purpose of a spout in the shape of a pigeon's beak to throw off water falling on the cornice. In this office it resembles, in some measure, the corona having a broad vertical face and with its soffit or under portion recessed so as to form a drip which prevents water running down the building. Its synonyms are : *vaktra-hasta* (face supported by hand, wherefrom it takes its shape), *lupā* (pent-roof), *gopānaka* (beam), and *chandra* (the moon). (Also *see M.*, XVI, 18–20.)

(1) *Mānasāra* :

Referring to the pedestal :

Tad-dvayaṁ chāmbujaṁ chordhve kapotochchaṁ guṇāṁśakam ।

(*M.*, XIII, 57.)

For further illustrations, *see* the lists of mouldings under UPAPĪṬHA.

Referring to the base :

Padmam aṁśaṁ tad-ūrdhve tu kapotochchaṁ tri(y)aṁśakam ।

(*M.*, XIV, 357.)

For further illustrations, *see* the lists of mouldings under ADHISHṬHĀNA.

Referring to the entablature :

Tad-ūrdhve vājanaṁ chaikaṁ dhātu-bhāgaṁ kapotakam ।

(*M.*, XVI, 27.)

For further illustrations, *see* the lists of mouldings under PRASTARA.

A synonym of the entablature :

Kapotaṁ prastraṁ chaiva mañchaṁ prachchhādanaṁ tathā ।

. . . paryāya-vāchakāḥ ।—(*Ibid.*, 18, 20.)

Referring to the six-storeyed buildings :

Prastarādi-kapotāntaṁ khsudra-nāsyā vibhūshitam ।

(*M.*, XXIV, 39.)

(2) ' A kapotam is a section of moulding made in the form of a pigeon's head. It is a crowning member of cornices, pedestals and entablatures. When employed in the latter, it often connects utility with beauty, inasmuch as the beak of the bird is so placed as to serve the purpose of a spout.'—(Rām Rāz, *Ess. Arch. of Hind.*, p. 24.)

KAPOTA-PĀLIKĀ(-PĀLI)—A pigeon-house, an aviary, 'properly dove-ridge, dove-list, may be rendered by crown-work, fillet, gable-edge, and even by cornice. A water-spout used at the roof to drain off water having the shape of pigeon's head or beak. In Tamil, *kapotakam* is explained as a moulding in masonry : *see* Winslow's *Tam. Dict.* i. v.' Then Dr. Kern quotes Rām Rāz's passage noticed under 'Kapota' and adds 'the same author (Rām Rāz) notices (p. 51) that the spout may be made to spring from the head of a lion, etc.'

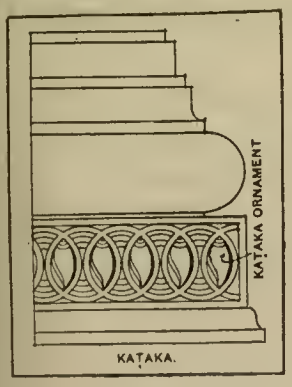
With this, Kern compares Utpala's definition :

> Kapota-pālikā grahaṇena bahir nirgatā mukhāni kāshṭhāny uchyante—by the acceptation of Kapota-pāli, the projecting lion-face timbers (mouldings) are understood ; (and also Viśvak, 6 767) :
>
> Prāsādau nirgatau kāryau kapotau garbha-mānataḥ ।
> Ūrdhvaṁ bhitty-uchchhrayāt tasya mañjaraṁ tu prakalpayet ।
> Mañjaryās chārdha-bhāgena śuka-nāsaṁ prakalpayet ।
> Ūrdhvaṁ tathārdha-bhāgena vedi-bandho bhaved iha ॥

Then Kern finds fault with Colebrooke's rendering of Kapota-pālikā and viṭaṅka (in his Amara-Kosha, quoted below) as 'dove-cot' and says 'Colebrooke's error, strange to say, has been perpetuated in all dictionaries ; the more reason now to draw attention to it.'—(*J.R.A.S.*, N. S., VI, p. 320, note 2.)

'A storey's altitude is of 108 digits (aṅgulas) according to Maya but Viśva-karman pronounces it to be of 3 cubits and a half, (i. e. 84 digits). As to this, however, able architects have declared that in reality there is no discrepancy of opinion, for, if you add the height of the crown-work (kapota-pālī), the smaller number will equal (the greater).' (*Bṛihat-Saṁhitā*, LVI, 29, 30.)

There is a compound word 'kapota-pālikā' or 'kapota-pāli' (dove-cot) in Sir William's *Dict.*, p. 202, c. 3. Similarly the words, 'kapota' and 'pālikā' or 'pāli' occur together in the *Bṛihat-Saṁhitā* and (its commentary) Ūtpala quoted above. But they do not occur as one word in Winslow's *Tamil Dict.*, in Viśvak and in Rām Rāz. In the twenty-eight instances in the *Mānasāra*, too, pointed out above (under KAPOTA), only the word 'Kapota' occurs. There is a different moulding called both 'Pāli' and 'Pālikā' in the *Mānasāra*. As regards the correctness of Dr. Kern's rendering of the term by 'dove-ridge,' or of Colebrooke's and Sir M. William's by 'dove-cot' nothing can be stated definitely as the term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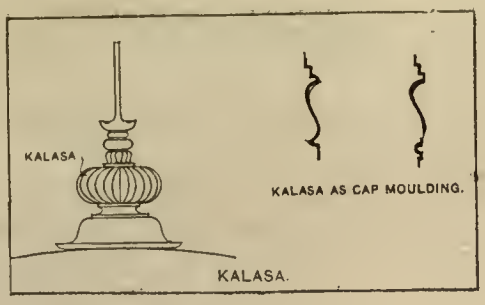
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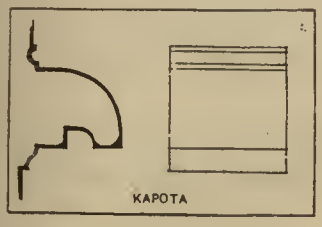
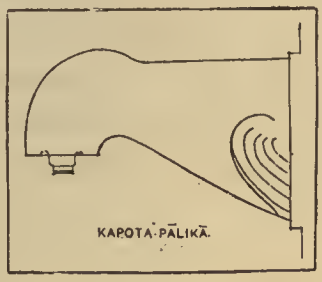
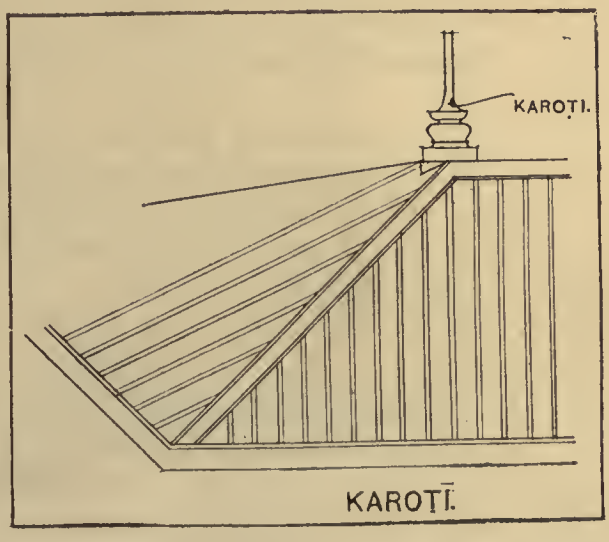

KAPOTA

KARNA PATRA.


KAPOTA-PĀLIKĀ.

KĪRTTI-VAKTRA.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is used figuratively to indicate a moulding and both the interpretations are possible.

Kapota-pālinī-yukta-mato gachchhati tulyatām ।

(*Bhavishya-Purāṇa*, Chap. cxxx, v. 37.)

Koṇa-pārāvataṁ kuryāt stūpy-āchchhādanakāni cha ॥
Koṇa-pārāvataṁ nyasya koṇa-loshṭāni vinyaset ॥

(*Vāstu-vidyā*, ed. Gaṇapati Śāstri, xvi, 27, 36.)

Bahiḥ kapota-karaṇaṁ vājanopari kalpayet ॥
Ardha-tri-pāda-daṇḍaṁ vā kapota-lambanaṁ bhavet ॥

(*Kāmikāgama*, liv, 21, 22 : *see also* vv. 36, 37.)

Chatur-guṇam (of the main temple) mukhāyāmaṁ prākārāṇāṁ viśeshataḥ ।
Kapotāntaṁ samutsedhaṁ hasta-vistāra-bhittikam ॥

(*Suprabhedāgama*, xxxi, 119.)

Kapota-pālikāyāṁ tu viṭaṅkaṁ puṁ-napuṁsakaṁ ॥

(*Amarakōsha*, ii, 3, 15.)

KAPOLA—The cheek of an image, an upper part of a building.

(1) Prāsādāu nirgatau kāryau kapolau garbha-mānataḥ ।

(*Matsya-Purāṇa*, Chap. cclxix, v. 11.)

(2) Chaturdhā śikharaṁ bhājya(m) ardha-bhāga-dvayasya tu ।
Śuka-nāsaṁ prakurvīta tṛitīye vedikā matā ॥
Kaṇṭham āmalasāraṁ tu chaturthe parikalpayet ।
Kapolayos tu saṁhāro dvi-guṇo'tra vidhīyate ॥

(*Ibid.*, Chap. cclxix, 18–19.)

(3) Mukha-tāraṁ kapolāntaṁ nava-mātram praśasyate ।

(*M.*, lxiii, 7.)

KABANDHANA—A knob at the end of the nail above the post of the bedstead.

Adhaḥ kīlena pādānāṁ madhye randhraṁ praveśayet ।
Tad-ūrdhve paṭṭikāṁ nyasya kīlāgre cha kabandhanam ।
Chaturbhiḥ śriṅkhalā-yuktam āndolaṁ chaikatopari ।
Deva-bhū-sura-bhūpānām anyeshāṁ śayanārthakam ।

(*M.*, xliv, 68–71.)

K(H)A-BHITTI—An upper storey-wall, an upper wall, 'kha' implying 'sky' and 'bhitti' wall.

Garbhādhāna-kramaṇakaṁ kaḥ(kha)-bhittir mukhya-dhāmani ।
Kaḥ(kha)-bhittir dakshiṇe bhāge saumyāvāsaḥ praśasyate ॥

Kaḥ-(kha)-bhitty-agrabhitter dvāra-dvayaṁ kuryād viśeshataḥ ।
Vāstu-dvāra-yutaṁ chaiva k(h)a-bhitteś cha viśeshataḥ ॥
Vāstūnāṁ pārśvayor madhye stambha-sajñaṁ nidhāpayet ।
K(h)a-bhitti-viṣṭritārthaṁ tu tat-pārśvayor dvayor hi (tat) ॥

(*Kāmikāgama*, XXXV, 45, 47, 48, 62 : LV, 31.)

KAMALA—A lotus, a class of the six-storeyed buildings.

(*M.*, XXIV, 17–18, *see* under PRĀSĀDA.)

KAMALĀṄGA—A class of the three-storeyed buildings.

(*M.*, XXI, 33–38, *see* under PRĀSĀDA.)

KAMPA—A fillet, a small flat band which occurs chiefly between mouldings to connect or separate them. 'Of all the rectangular mouldings it has the least height. Its projection, though generally equal to its altitude, frequently varies according to the position of the principal members, which it is employed, to connect or to separate. It answers in every respect to the fillet.'

(Rām Rāz, *Ess. Arch. Hind.*, p. 24.)

Referring to the pedestal :

Utsedhe tu chatur-viṁśat . . . ।
Ekena kampam ityuktam . . . ।
Kampam ardhaṁ tathā karṇam . . . ।—(*M.*, XIII, 36–37, 49.)

For further examples, *see* the lists of mouldings under UPAPĪṬHA.

Referring to the base :

Ekena-triṁśad aṅgaṁ (=aṁśaṁ) tu tuṅgaṁ kṛitvā . . . ।
Kampam ekena kartavyam . . . ।—(*M.*, XIV, 14–16.)

For further examples, *see* the lists of mouldings under ADHISHṬHĀNA.

KAMPA-DVĀRA—A side-door, a private entrance.

(1) Kampa-dvāraṁ tu vā kuryān madhya-pārśva-dvayos tathā ।

(*Kāmikāgama*, XXXV, 49.)

(2) Mukhya-dvāraṁ tu tad-vāme kampa-dvāraṁ tad-anyake ।

(*Ibid.*, LV, 32.)

KAMPANA (same as KAMPA)—A fillet.

Cf. the lists o mouldings under ADHISHṬHĀNA.

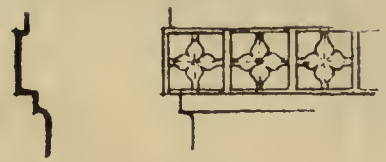
KAMPA-BANDHA—A class of bases. It has four types differing from one another in height and in the addition or omission of some mouldings.—(*See M.*, XIV, 361–372, under ADHISHṬHĀNA.)

KAMPA-VṚITTA—The round or circular fillet.

Kampa-vṛittaṁ cha lupā-mūle śobhārthaṁ tu balārthakām ।

(*M.*, XVIII, 274.)

I. VĀJANA WITH PRATI-VĀJANA BELOW

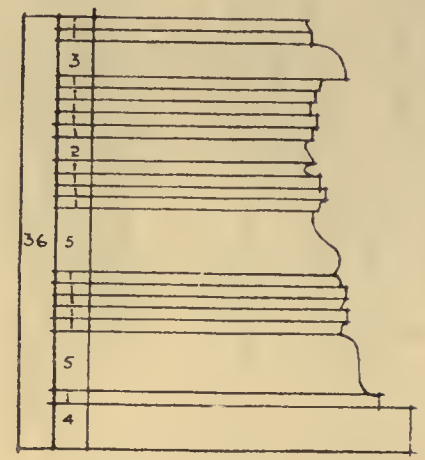


RATNA-PATTA

NIMNA OR SPLAY

VAJRA-PATTA

SUBSIDIARY MOULDINGS BASED ON VĀJANA TYPE



KAMPA-BANDHA BASE.
OF 36 PARTS.

KARAṆḌA—A head-gear, a basket or bee-hive-like ornament.

Karaṇḍa-mukutopetaṁ rakta-vastrottarīyakam ।
Karaṇḍa-mukuṭopetaṁ dhyātvā . . . ।—(*M.*, vii, 164, 205.)
Devānāṁ bhūpatīnāṁ cha mauli-lakshaṇam uchyate ।
Jaṭā-mauli-kirīṭaṁ cha karaṇḍaṁ cha śirastrakam(-strāṇam) ।
Kanyasā(ṁ) devatānāṁ cha karaṇḍa-makuṭānvitam ।

(*M.*, xlix, 12-13, 19.)

Dvi-bhujāṁ cha dvi-netrāṁ cha karaṇḍa-mukuṭānvitam ।

(*M.*, liv, 69, 76.)

KARAVĪRA—A fragrant plant, or flower (oleander or *Nerium odorum*), an ornament of that shape, a pent-roof having the slope (or colour) of that flower.

In connexion with the pent roof :

Śroyṇāṁ madhya-lupāḥ sarve(vā) lupā-saṁkhyā yatheshṭakā ।
Karavīra-bahu-varṇā saṁputābhaṁ vikalpayet ।

(*M.*, xxviii, 242-243.)

KARI-KARṆA(ṆIKĀ)—The ear of the elephant, (? the tip of an elephant's trunk, karṇikā), an ornament of that shape.

Upābja(ṁ) karikarṇa-(another reading, karṇikā)-yuktaṁ kuryāt tat kshudra-pīṭhakam ।—(*M.*, xxxii, 117.)

KARIKA—A moulding of a column.

Vīra-karṇa(-kaṇṭha)syodayaṁ jñātvā nava-bhāga(e) vibhājite ।
Ekāṁśaṁ pādukaṁ kuryāt pañcha-bhāgaṁ tu saṁgraham ।
Tad-ūrdhve karikāṁśaṁ syād abjam aṁśena yojayet ।

(*M.*, xv, 176-178.)

KARUṆA-VĪṆĀ—A flute, a sculptural ornament.

Vadana-garuḍa-bhāvaṁ bāhukau paksha-yuktau ।
Mukuṭa-kamala-yuktaṁ pushpa-sachchhāya-varṇam ।
Parita(ḥ) karuṇavīṇā kinnarasya rūpakam ।—(*M.*, lviii, 21-22.)

KAROṬI(Ī)—A basin, the drum of the ear of an image, an architectural ornament.

An ornament of the pent-roof :

Evam uktaṁ lupā chordhve śikharair vāmbare'pi vā ।
Phalakā-kshepaṇaṁ vāpi tāmraṁ vāyasi kīlayet ।
Hemajena karoṭīṁ vā mṛit-karoṭīṁ vidhānayet ।

(*M.*, xviii, 269-271.)

Referring to a single-storeyed building :

Karoṭivad alaṅkṛitya lambane patra-saṁyutam ।—(*M.*, xix, 41.)

KARKAṬA—A crab, a moulding, a kind of joinery resembling the crab's leg.

Karkaṭakāṅghrivat kṛitvā pautra-nāsāṅghriṁ veśayet ।
Etat saṁkīrṇa-sandhiḥ syāt sarva-harmyeshu yogyakam ।

(*M.*, XVII, 143-148.)

KARKARĪ-KṚITA—Paved with small pieces of stone. Consolidated with kankar (nodular limestone or gravels).

(1) Mahā-mārgaṁ tu sarveshāṁ vīthīnāṁ karkarī-kṛitam ।
Vīther(thyāḥ) etad dvayaṁ proktaṁ tan-madhye karkarī-kṛitam ।—(*M.*, IX, 197, 333.)

Referring to the pedestal :

Prativājanakaṁ teshāṁ kṛiteḥ karkarī-kṛitam ।—(*M.*, XIII, 151.)

Referring to the gate-house (gopura) :

Etat tu śikharaṁ proktaṁ karkarī-nāsikā-kṛitam ।

(*M.*, XXXIII, 561.)

Referring to the maṇḍapa (pavilion) :

Tach-chatush-karṇa-deśe tu karkarī chāshṭa-bhadrakam ।
Tat karṇaṁ cha dvayor bhadraṁ chaturthaṁ karkarī-kṛitam ।
Karkarī-bhadra-saṁyuktaṁ maṇḍapasya viśālakam ।

(*M.*, XXXIV, 305, 308, 309.)

Maṇḍape chordhva-kūṭaṁ syāt śālākāraṁ tu yojayet ।
Ashṭa-vaktra-samāyuktaṁ karṇeshu karkarī-kṛitam ।

(*Ibid.*, 530-531.)

Referring to the śālā (hall, mansion) :

Veda-vedāṁśakaṁ madhye vivṛitaṁ saṁvṛitāṇḳ(g)aṇam ।
Tad-bahiś chāvṛitāṁśena karkarī-samalaṁkṛitam ।

(*M.*, XXXV, 300-301.)

(2) In connexion with the description of a Svastika (shaped)-house :

Pṛishṭhe tu dīrgha-koshṭhaṁ syāt pūrva-koshṭhaṁ tathā bhavet ।
Bāhya(-e) bāhya(-e) śālā-dvayaṁ netraṁ yuktaṁ tu karkarī-yutam ॥

(*Kāmikāgama*, XLII, 7.)

KARṆA—The ear of an image, a moulding, any side-object, a corner-tower.

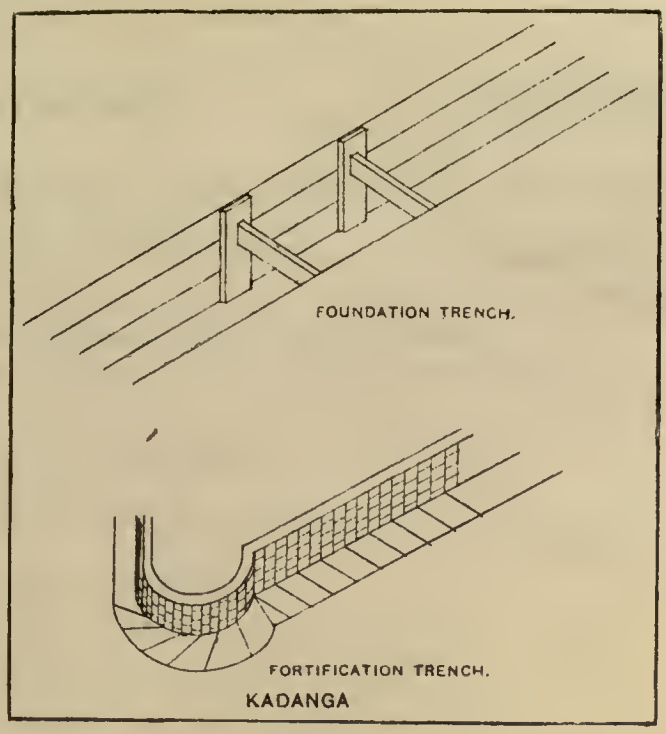
Kampam ardhaṁ tathā karṇaṁ tad-ūrdhve'ṁśena paṭṭikā ।

(*M.*, XIII, 49.)

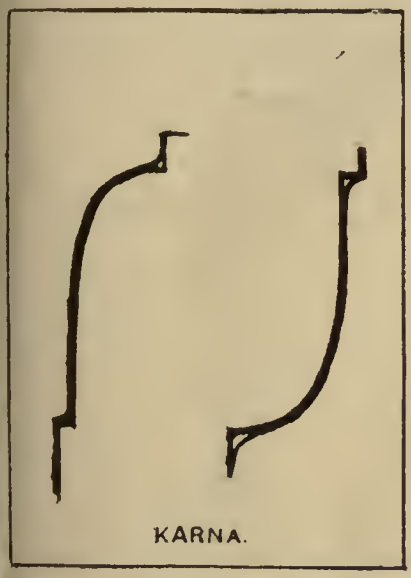
For further examples, *see* the lists of mouldings under UPAPĪṬHA.

A moulding of the base :

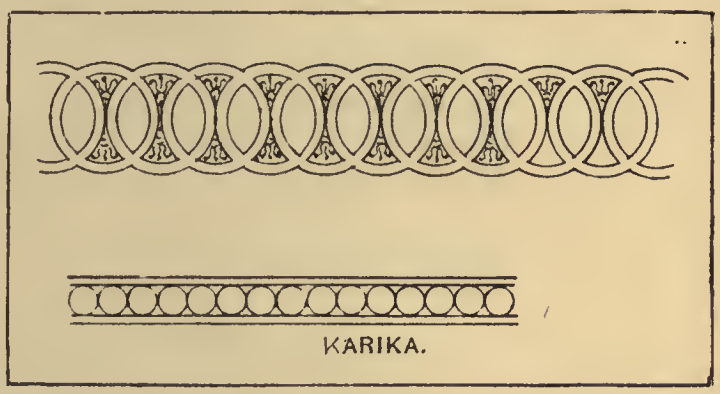
Karṇa-tuṅga(ṁ) tr(i)yaṁśaṁ syāt tad-ūrdhve kampa(ṁ) śivāṁśakam ॥—(*M.*, XIV, 12.)



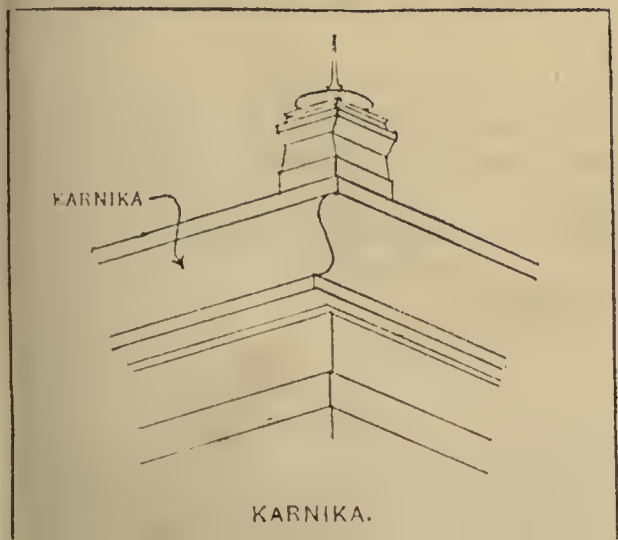
KADANGA



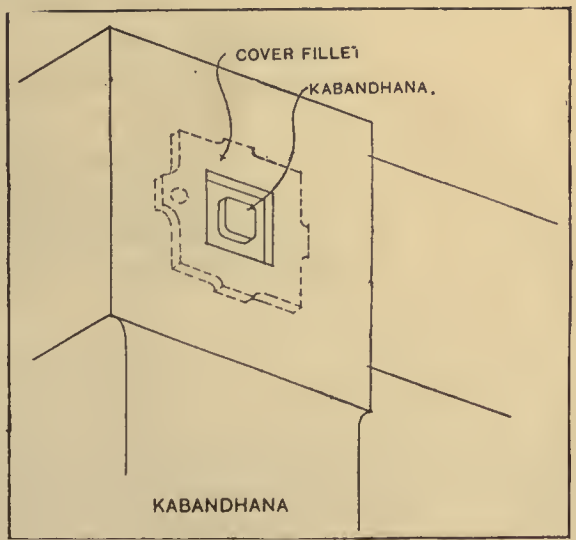
KARNA.



KARIKA.



KARNIKA.



KABANDHANA

For further examples, *see* the lists of mouldings under ADHISHṬHĀNA.

A moulding of the column :

Kumbhāyāmaṁ tathotkarṇam ūrdhve karṇa(ṁ) samaṁ bhavet ।

(*M.*, xv, 54.)

Referring to the vimāna (building in general, temple) :

Padmasyopari karṇaṁ syāt tat-tridhā kumbha-vistṛitam ।

(*M.*, xviii, 129.)

Karṇāt kanyāvasānaṁ syān nava-sūtraṁ prasārayet ।—(*Ibid.*, 235.)

Referring to the door :

Ardhena kampa-saṁyukataṁ karṇa(ṁ) bandh(v)aṁśam īritam ।

(*M.*, xxxix, 69.)

Referring to the tulā (balance) :

Suvṛitta-nāla-deśe tu patra-mūle tu karṇa-yuk ।—(*M.*, l, 205.)

A moulding of a vedikā (altar, railing, platform) :

Vedikāyāṁ vihīnaṁ chet kartṛi-dṛishṭi(r) dīnaṁ vrajet ।
Tat-karṇe'dhika-hīnaṁ ched bhojanena vināśanam ।

(*M.*, lxix, 26–27.)

Referring to a single-storeyed building :

Tad eva vedikāṁśena nava-bhāga(-e) vibhājite) ।
Dvi-bhāgaṁ vājanaṁ mūle chordhve karṇaṁ guṇāṁśakam ।

(*M.*, xix, 64–65.)

KARṆĀSHṬAKA—A site-plan of 324 square plots.

(*M.* vii, 213–24, *see* PADA-VINYĀSA.)

KARṆA-KŪṬA (*see* KŪṬA-KOSHṬHA)—The tower at the corner of the roof, the side-niches, corner pavilions, the attic.

(1) Karṇa-harmyasya vistāraṁ shaḍ-bhāgaṁ(ge) tu vibhājite ।
Ekāṁśaṁ karṇa-kūṭaṁ syān madhye śālā dvayāṁśakam ।

(*M.*, xix, 54–55, *see* also 167.)

In connexion with the six-storeyed buildings :

Ekaṁ vātha dvi-bhāgaṁ vā karṇa-kūṭa-viśālakam ।
Tale tale karṇa-kūṭa-koshṭha-hārādi-bhūshitam ।
Karṇa-kūṭa-viśāle tu tri-bhāgaikaṁ madhya-bhadrakam ।

(*M.*, xxiv, 29, 30, 33.)

Ekaṁ vātha dvi-bhāgaṁ vā karṇa-kūṭa-viśālakam ।—(*M.*, xxv, 17.)

In connexion with the gate-house (gopura) :

Evaṁ lalāṭayoś chaiva dīrghaṁ vinyāsyam uchyate ।
Karṇa-kūṭa-dvayaṁ chaiva tad-bhāga-dvayam īritam ।
Madhya-koshṭhaṁ chaturthaṁ cha karṇa-kūṭaṁ chatushṭayam ।

(*M.*, xxxiii, 418–424.)

(2) Agra-karṇa-samāyuktaṁ karṇa-kūṭa-dvayānvitam ॥
Karṇa-kūṭa-vihīnaṁ vā chānyat sarvaṁ tu vāstushu ॥
Chatush-koṇe chatush-kūṭaṁ tad-vistāreṇa nirmitam ॥
Pañjara-dvitayaṁ kāryaṁ karṇa-kūṭa-samodayam ।
Pradhānāvāsa-netrastha-netra-kūṭa-dvayaṁ nayet ॥

(*Kāmikāgama*, xxxv, 65, 66, 73, 75.)

Sarvam aṅgaṁ sabhākāraṁ karṇa-kūṭa-vivarjitam ॥
Chatasras tu sabhā kāryā koṇa-kūṭa-chatushṭayam ॥

(*Ibid.*, xlv, 41, 44.)

Kūṭa-koshṭhaka-nīḍānāṁ pramāṇam iha kīrtitam ।
Kūṭa-koshṭhādi-sarvāṅgaṁ māna-sūtrād bahir nayet ॥
Antaḥ pramāṇa-sūtrāt tu veśanaṁ sarva-deśadam ।
Chatur-asraṁ vasvasraṁ shoḍaśāsraṁ tu vartulam ॥
Mastakam stūpikopetaṁ karṇa-kūṭam idaṁ matam ।
Madhye nāsā-samāyuktam ardha-kūṭi-samanvitam ॥
Mukha-paṭṭikayopetaṁ śakti-dvaya-sama vitam ।
Ancka-stūpikopetaṁ koshṭhakaṁ madhyaśo bhavet ॥
Haṁsa-tuṇḍa-nibhaṁ pṛishṭhe śālākāraṁ mukhe mukhe ।
Pañjaraṁ vihitaṁ kūṭa-koshṭhayor antaraṁ dvijāḥ ॥
Pārśva-vaktraṁ tad evāshṭaṁ hasti-tuṇḍa-sa-maṇḍaṇam ।
Esha jāti-kramāt proktaḥ karṇa-koshṭha-samanvitam ॥
Madhye kūṭaṁ tayor madhye kshudra-koshṭhādi-śobhitam ।
Chhandam etat samuddishṭaṁ kūṭaṁ vā koshṭhakaṁ tu vā ॥
Antara-prastaropetaṁ nimnaṁ vonnatam eva vā ।
Vikalpam iti nirdishṭam ābhāsaṁ tad vimiśritam ॥

(*Ibid.*, lv, 123–130.)

(3) Prastarād-ūrdhva-bhāge tu karṇa-kūṭa-samāyutam ॥

(*Suprabhedāgama*, xxx, 30.)

'The attic is formed of different kinds of little pavilions. Those which are at the angles of the edifice are called karṇa-kūṭa. They have a roof of square or circular section and are surrounded by a single awn, *stūpi*.'

'Those which are placed in the middle are called *śālā*, they have an elongated roof and have three *stūpis*.'—(*Cf. M.*, xix, 54–55.)

'Between the karṇa-kūṭa and śālā are found some kinds of little windows called *pañjara*.'—(*Dravidian Architecture*, by Jouveau-Dubreuil, ed. S. Krishna Swami Aiyangar, pp. 13, 5.)

KARṆA-PATRA—A leaf-like ornament for the ear, a corner leaf.

Tasyādho ratna-dāmaiś cha lalāṭordhve'rdha-chandravat ।
Karṇa-patra-samāyuktaṁ śrotrordhve karṇa-pushpayuk ।
Tasmāt tu lambanaṁ dāma sarva-ratnair alaṅkṛitam ।

(*M.*, xlix, 112–114.)

KARṆA-PŪRAKA—An ear ornament.

Kuryāt trī-valayopetaṁ na kuryāt tu śikhā-maṇim ।
Sarva-ratnaṁ vinyasya vinā cha karṇa-pūrakam ।
(*M.*, XLIX, 138-139.)

KARṆA-BANDHA—An ornament for the ear, a part of the ear.

Karṇa-bandhaiḥ karṇa-rudrāksha-mālā ।—(*M.*, LXII, 67.)

The lower part of the ear :

Hanvantaṁ karṇa-bandhāntaṁ dvayāntaraṁ daśāṅgulam ।
(*M.*, LXV, 102.)

KARṆA-HARMYA—A tower, a side-tower, a minaret, a turret.

In connexion with single-storeyed buildings :

Karṇa-harmyasya vistāraṁ shad-bhāgaṁ tu vibhājite ।
Ekāṁśaṁ karṇa-kūṭaṁ syān madhye śālā dvayāṁśakam ।
Ekaṁ vā dvi-tri-daṇḍena nirgamaṁ bhadram eva vā ।
Śālā-kūṭa-dvayor madhye chaika-hārāsa-pañjaram ।
Tat-tuṅga(ṁ) sapta-bhāgaṁ syād ekāṁśaṁ vedikodayam ।
Tad-ūrdhve'dhyardha-bhāgena galaṁ tryaṁśena mastakam ।
Tad-ardhaṁ stūpikottuṅgaṁ karṇa-harmyam iti smṛitam ।
(*M.*, XIX, 54-60.)

Maṇḍape prastarasyordhve karṇa (another reading, khaṇḍa)-harmyādi-maṇḍitam ।—(*Ibid.*, 214.)

Stūpi-tuṅgaṁ dvayāṁśaṁ syād dvi-tale tad dvitīyakam ।
Tad evordhvam adhishṭhānaṁ vimānāṁśeka(aika)-vitastikam ।
Tad-ūrdhve'ṅghṛī śarāṁśaṁ syāt karṇa-harmyādi-maṇḍitam ।
(*M.*, XX, 14-16.)

Prachchhādanopari stambhaṁ karṇa-harmyādi-maṇḍitam ।
(*M.*, XXXI, 10.)

Tad-ūrdhve maṇḍapānāṁ cha chū'ikā karṇa-harmyakam ।
(*M.*, XXXIV, 64.)

Harmye chordhva-tale pādaṁ bāhya-kūṭādi(ṁ) vinyaset ।
Karṇa-harmyākṛitiṁ vātha sāntara-prastaraṁ tu vā ।
(*M.*, XX, 57-58.)

Cf. 'They (tomb of the Rājās at Mahadēvapura in Coorg from 1809) are square buildings, much in the Muhammadan style, on well raised basements, with a handsome dome in the centre, and minaret-like turrets at the four corners (? karṇa-harmya) surmounted by basavas or bulls. On the top of the dome is a gilded ball, with a vane. All the windows have well-carved syenite frames with solid brass bar . . . Good wood-carving may sometimes be seen in the domestic architecture.'—(*Ep. Carnat.*, Vol. I, Introduction, p. 27, last paragraph.)

KARṆIKĀ—Generally implies a crowning projection and resembles the cornice, i.e., the crowning or upper portion of the entablature, a creeper-like ornament.

Vistāre pañcha-bhāge tu vedārdhaṁ padma-vistṛitam ।
Padma-tāra-tri-bhāgaikaṁ karṇikā-vistṛitaṁ bhavet ।

(*M.*, XXXII, 110–111.)

A moulding of the entablature :

Kapota-nāsikā-kshudra-nivrordhve sthita-karṇikā ॥
Vātāhata-cha'ach-chāru-latāvat karṇikā-kriyā ॥

(*Kāmikāgama*, LIV, 37, 40.)

KARṆIKĀRA—A pavilion with twenty pillars, a tree, a class of people.

(*Matsya-Purāṇa*, Chap. CCLXX, v. 13; *see* under MAṆḌAPA.)

Mahendre vātha satye vā karṇikārālayaṁ bhavet ।

(*M.*, IX, 238, XL, 109.)

KALAŚ(S)A (*cf.* STŪPI)—A pitcher, a cupola, a finial, a dome, a pinnacle, a tower, a type of round buildings.

(1) *Agni-Purāṇa* (Chap. CIV, vv. 17–18, *see* under PRĀSĀDA).

(2) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 21, 23, 28–29, *see* under PRĀSĀDA).

(3) Stambhārdhaṁ kalaśād bāhye latā-vartanam ishyate ॥
Mushṭi-bandhopari kshiptaṁ vyālāntaṁ kalaśāvadhi ॥

(*Kāmikāgama*, LV, 103, 109.)

(4) Dome : Kāñḍhanāṇḍa-kalasa ।—(Khajuraho Inscrip. no. v, line 19, *Ep. Ind.*, Vol. I, p. 150.)

(5) Pinnacle : Vimānopari sauvarṇṇāḥ kalaśā . . . pratishṭhāpitāḥ । Placed golden pinnacle on the shrine.—(Yena-Madala Inscrip. of Ganapamba, v. 17, *Ep. Ind.*, Vol. III, pp. 99, 102.)

(6) Dome or pinnacle :

Devālayais sudhā-śubhrais suvarṇa-kalaśāṁkitaḥ ।
Patākā-chumbitāmbhodair yyad-dharmmo nīta unnatim ॥

(Two pillar Inscrip. at Amaravati, no. A, Inscrip. of Keta, II, v. 43, *Ep. Ind.*, Vol. VI, p. 152.)

(7) Prāsādaṁ navabhiś cha hema-kalaśair atyunnataṁ gopura-prākārotsava-maṁṭapair upachitaṁ śrī-Rāmabhadrāya cha ।

'An exceedingly high temple furnished with nine gilt domes, a gate-tower, a wall, and a festive hall, to the holy Rāmabhadra.'

(Kondavidu Inscrip. of Krishnaraya, v, 27, *Ep. Ind.*, Vol. VI, pp. 237, 331.)

(8) Suvarṇṇa-kalaśa-sthāpanā cha—'in setting golden pinnacles (on temples)'.—(Karkala Inscrip. of Bhairava II, line 18, *Ep. Ind.*, Vol. VIII, pp. 132, 135.)

(9) Abhinava-nishpanna-preksha-madhya-maṁdape . . .

Suvarṇṇamaya-kalaśa-ropaṇa-pratishṭhā kṛitā—'the ceremony of placing a golden cupola on the newly-made central hall, intended for dramatic performances, was carried out.'—(The Chahamanas of Marwar, no. XIX, Jālor stone Inscrip. of Samarasiṁhadeva, lines 5, 6, *Ep. Ind.*, Vol. XI, p. 55.)

(10) Uttuṁgatāspada-devāyatanāgra-hema-kalaśaṁ . . . pūrṇṇa-kalaśam . . . 'The golden cupola on the summit of the god's dwelling, a seat of exaltation . . . like a full pitcher.'—(Inscrip. at Ittagi, A of A. D. 1112, v. 64, *Ep. Ind.*, Vol. XIII, pp. 46, 56.)

(11) 'And Viśvakarmma built his temple (Ananta-Kotīśvara) with complete devotion, adorned with all manner of pictures, its fronts brilliant with many golden kalaśas decked with precious stones, its tower kissing the clouds.'—(*Ep. Carnat.*, Vol. VIII, Part I, Sorab Taluq, no. 276; Transl., p. 47, second para. last sentence.)

(12) 'We grant to you, in addition, two five-branched torches, five kalaśas above the palanquin and so forth.'—(*Ep. Carnat.*, Vol. VIII, Part I, Nagar Taluq, no. 68, p. 158; Transl., line 12.)

(13) Chakre jāmbū-nadyair gurutara-kalaśair bhāsvarair ekaviṁśaiḥ |
Nepāla-kshonī-pālaḥ prathita-bhuja-bhūshaṇaṁ taṇmaṭhasya ||

(Inscrip. from Nepal, no. 17, Inscrip. of Siddhi Nṛisiṁha of Lalita pattana, v. 17, *Ind. Ant.*, Vol. IX, pp. 185, 187, c. 1.)

(14) 'Above the seventh or highest row of cells, there is a roomy terrace occupied by four large bulls couchant at the corners, and from the centre rises a comparatively slender neck surmounted by an umbrella or semi-dome crowned by the usual kalaśa or finial.'—(Gangai-Konda-puram Śaiva temple, *Ind. Ant.*, Vol. XI, p. 118, c. 1.)

(15) 'Erected a new gopura with golden finials (suvarṇa-kalaśa) in the Chāmuṇḍeśvarī hill.'—(*Ep. Carnat.*, Vol. III, Mysore Taluq, no. 20; Transl., p. 3; Roman text, p. 6.)

(16) 'The pinnacle (kalaśa) of a ruined temple in the fort of Bellur, in Nāga-maṅgala Taluq, shows exactly what the finial ornament of this style of temple was, which Fergusson, from its appearance in photographs mistook for a lantern and though unable to account for so incongruous a feature introduced it into his picture of Halebid temple restored' (*Hist. of Ind. and East. Arch.*, p. 400). 'The crowning ornament is really a kalaśa or sacrificial vase, such as is used at the

final consecration ceremonies round the rim of which is tied a cloth in narrow folds and knotted into a bunch at each of the four cardinal points. In later ornamentation the cloth was replaced by wreaths of leaves and flowers with a cluster or bouquet at the four points, the sprays and flowers depending from which went down as far as the foot of the vase, and thus produced the appearance which in the picture suggested a lantern.'—(*Ep. Carnat.*, Vol. IV, Introduction, p. 38.)

(17) Saumya-keśava-nāthasya gopurāgre hiraṇmayī ।
Sthāpitā kalaśī guṇḍa-daṇḍa-nāthena śāśvatī ॥
Saudhāgram ujvalad anyūn a-divākarābho ।
Bālātapa-pratima-kāntir aharniśaṁ yaḥ ॥

(*Ep. Carnat.*, Vol. V, Part I, Belur Taluq, no. 3 ; Roman text, p. 103, last two verses ; Transl., p. 45, para. 1, last two lines.)

(18) Murahara-bhavanada śālākheyaṁ māḍisi vistaradiṁ kaḷaśama nilisida—'He made a spire to the temple of Murahara, and fixed a kalaśa upon it.'—(*Ep. Carnat.*, Vol. V, Part I, Arsikere Taluq, no. 131 ; Roman text, p. 396 ; Transl., p. 172.)

(19) Aneka-ratna-khachita-ruchira-maṇi-kulaśa-kalita-kūṭa-koṭi-ghaṭi-tam-apy-uttuṅga-chaityālayaṁ—'having erected . . . a lofty chaityālaya, with kalaśas (perhaps by mistake Mr. Rice has put in gopuras) or towers surmounted by rounded pinnacles set with all manner of jewels.'—(*Ep. Carnat.*, Vol. VI, Mudgere Taluq, no. 22 ; Roman text, p. 148, line 12 ; Transl., p. 63, para. 2.)

(20) 'Kalaśa, a term applied generally to the summit of a tower ; also a pot or vessel with water and some grains in it.'—(Rea, Chālukyān Architecture, *Arch. Surv.*, New Imp. Series, Vol. XXI, p. 38.)

(21) 'Kalasa (Kalas)—pinnacle of temple steeple.'—(Smith, Gloss., *loc. cit.*, to Cunningham *Arch. Surv. Reports*.)

(22) *See* Maghul Arch. of Fatehpur-Sikri, Smith, *Arch. Surv.*, New Imp. Series, Vol. XVIII, Plate LXII, fig. 1, 2, 3.

(23) *Essay on Arch. of Hind.*, Rām Rāz, Plates XX to XLII ;

(24) *Mysore Arch. Report*, 1914–15, Plate XIV, fig. 3, p. 28 ; fig. 1, p. 22 ; Plate V, fig. 2, p. 10 ; Top of tower of Bhoganandīśvara shrine at Nandi, *ibid.*, 1913–14, Plate VI, fig. 2, p. 16.

(25) Cunningham, *Arch. Surv. Reports*, Vol. VII, Plates XVII (showing the details of the mouldings of the tower of the temple at Khalari), XIV (showing the mouldings and section of another temple tower).

KALAŚA-BANDHA (*see* KUMBHA-BANDHA)—A class of bases.

(*M.*, XIV, 195–239 ; *see* under ADHISHṬHĀNA.)

KALĀ—Art, sciences dealing with the traditional sixty-four branches which some authorities reckon as 528.

(1) Gīta, (2) vādya, (3) nṛitya, (4) ālekhya, (5) viśeshaka-chchhedya, (6) taṇḍula-kusuma-vali-vikāra, (7) pushpāstaraṇa, (8) daśana-vasana-aṅga-rāga, (9) maṇi-bhūmikā-karma, (10) śayana-rachana, (11) udaka-vādya, (12) udakāghāta, (13) chitra-yogā, (14) mālya-grathana-vikalpā, (15) śekharakā-pīḍaṇa-yojanā, (16) ncpathya-prayogā, (17) karṇa-patra-bhaṅgā, (18) gandha-yukti, (19) bhūshaṇa-yojana, (20) aindra-jālā, (21) kauchumāra-yogā. (22) hasta-lāghava, (23) vichitra-śāka-yūsha-pūpa-bhakshya-vikāra kriyā, (24) pānakarasa-rāgāsava-yojana, (25) sūchi-vāya-karma, (26) sūtra-krīḍā (27) vīṇā-ḍamaruka-vādya, (28) prahelikā, (29) pratimālā, (30) durva-chaka-yogā, (31) pustaka-vāchana, (32) nāṭakākhyāyikā-darśana, (33) kāvya-samasyā-pūraṇa, (34) paṭṭikā-vetra-vāṇa-vikalpā, (35) tarku-karman, (36) takshaṇa, (37) vāstu-vidyā, (38) suvarṇa-rūpya-parīkshā, (39) dhātuvāda, (40) maṇi-rāgākara-jñāna, (41) vṛikshāyur-veda-yogā, (42) mesha-kukkuṭa-lāvaka-yuddha-vidhi, (43) śuka-sārikā-pralāpana, (44) utsādana-saṁvā-hana-keśamardana-mārjana-kauśala, (45) akshara-mushṭika-kathana, (46) mlechchhita-kutarka-vikalpā, (47) deśa-bhāshā-vijñāna, (48) pushpa-sakaṭikā, (49) nimitta-jñāna; (50) yantra-mātṛikā, (51) dhāraṇā-mātṛikā, (52) sampāṭhya, (53) mānasi-kāvya-kriyā, (54) abhidhāna-kosha, (55) chhanda-jñāna, (56) kriyā-vikalpa, (57) chhalitaka-yoga, (58) vastra-gopana, (59) dyūta-viśesha, (60) ākarsha-krīḍā, (61) bāla-krīḍanaka, (62) vaitālika, (63) vaijayika, (64) vyāyāmika-vaināyika-vidyā-jñāna.—(*Kāmasūtra* of Vātsyā-yana, ed. Bombay, pp. 32–35; *see also* pp. 43, 95.)

See J.R.A.S., 1924, pp. 355–367.

Compare the lists from (1) *Kalpasūtra* (211), (2) *Daśakumāra-charita* (II, 21), (3) *Kādambarī*, p. 75, (4) *Kalāvilāsa* by Kshemendra, (5) *Samavāya-sūtra*, (6) Ramachandra's *Commentary on Champurāmāyaṇa* by Vidabharāya, (7) Nārāyana's *Commentary on Lalita-sahasranāma*, (8) *Śrīmad-Bhāgavata*, (9) *Kāmasūtra* of Vātsyāyana, and (10) Bhaskararāya's *Commentary on Lalita-sahasranāma* (N. S. P., 1917), p. 72.

Similar lists are also given by Śrīdhara in his *Commentary on Śrīmad-Bhāgavata* (Part X, Chap. XLV, v. 36), Jīva-gosvāmi in explaining Śrīdharā's commentary refers also to the *Vishṇu-Purāṇa*, and *Hari-vaṁsa* ; in the *Buddhist Lalitavistara* (Chap. X, ed. R. L. Mitra, p. 182 ; *see also* p. 186), and in the *Jain Uttarādhyāyana-sūtra* (text, Chap. XXI, 6, Transl., *S. B. E.*, Vol. XLV, p. 108). *See also The Kalās*, by Venkaṭasubbia (pp. 25–32).

Chatuḥshashṭhikalāḥ, Śārṅgadharīye kathāṁśe cha Śrīdharīya-Lakshmīpīṭhikāyāṁ cha vailakshaṇyena gaṇitāstā nishkṛishya likhyante : Then follows a list of sixty-four arts including eighteen scripts, various languages,

poetry books, Nāṭakas (dramas), alaṅkār (poetics), vedas, upa-vedas, vedāṅgas, Śāstras (without specification), Tantras, Purāṇas, Smṛitis, agriculture, witchcraft, sorcery, gambling, etc.

For fuller details *see* the writer's article 'Fine Arts' (*Indian Historical Quarterly*) and 'Fine Arts in Our System of Education' (Convocation address, Gurukula, Brindavan, 1937, *The Hindustan Review*, June, 1936, pp. 784–796). *Vide* the Introduction to the writer's *Hindu Architecture in India and Abroad*.

KALĀPAKA—A tuft of braided hair, a sectarian mark on the forehead of an image.

Prakoshṭe valayaṁ chaiva ·maṇi-bandha-kalāpakam ।

(*M.*, L, 16, etc.)

KALKA—A paste used as plaster or cement, also called 'yoga' (mixture).

(*Bṛihat-Saṁhitā*, LVII, 3, 6, 7, 8, *J.R.A.S.*, N. S., Vol. VI, pp. 321, 322.)

KALPA-DRUMA— } The ornamental tree, employed as a carv-
KALPA-VṚIKSHA—} ing (*see* ŚRĪ-VṚIKSHA).

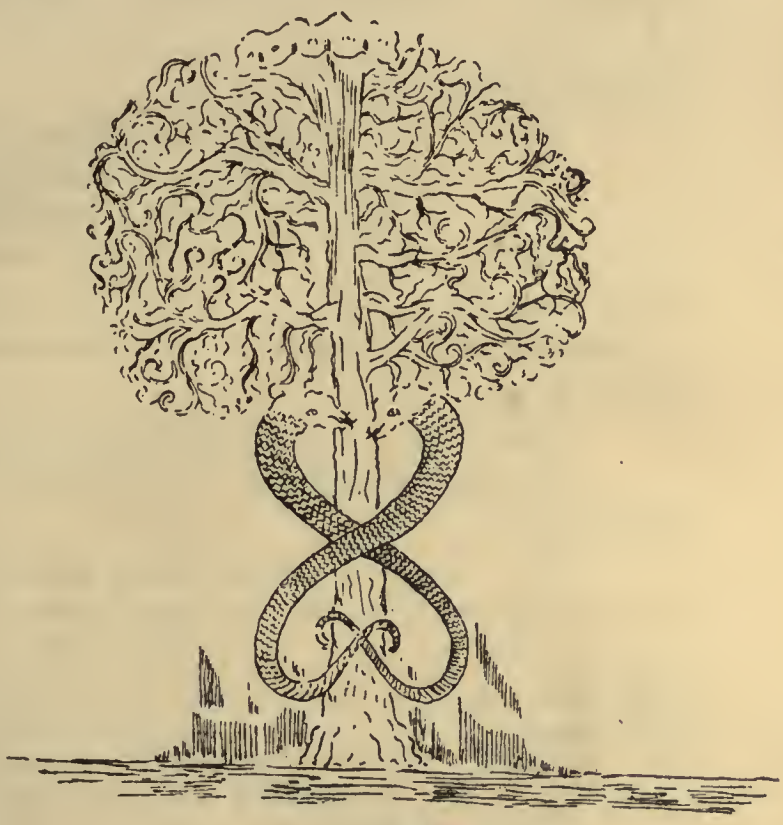
Compare Akshaya-vaṭa at Prayag (Allahabad), Siddha-vaṭa at Ujjain, and Bodhi-tree at Gaya.

(1) *Mānasāra* (Chap. XLVII, 1–77) :

The name of the chapter is Kalpa-vṛiksha, which literally means a tree yielding all wishes, or, in other words, an all-productive tree. This tree is used as an ornament of the throne of gods and kings (lines 1–2). Such a tree is made above the throne and the arch as well as at the middle of the length of the throne (lines 4–5). It is also constructed inside the Mukta-prapāṅga or an open courtyard, the maṇḍapa or a pavilion, and the royal palace (lines 68–69). Beyond the front of the ornamental tree, there should be represented a yard where the votaries of gods and kings are seated in the pose of praising and worshipping them (lines 70–75).

The minute description and measurement of all the various parts of the tree are given. The tree is coiled round with a serpent the outspread hood of which reaches the top (lines 11–12). The measurement of the hood and tail of the serpent is described at great length (lines 13–20). The number of branches as also the measurement of them varies according to the various thrones for the decoration of which the tree is constructed (lines 21–43).

THE ORNAMENTAL TREE
FOR THRONES OF GODS AND KINGS
NOT TO SCALE



KALPADRUMA

The tree is beautifully decorated with creepers, leaves and flowers of various colours and forms (lines 114–155, 62–66). Bees are represented on the branches (line 56). Jewels and garlands of pearls are inserted in suitable places (line 57). The figures of monkeys, deities and semi-divine beings (Sidhas, Vidyādharas, etc.) are beautifully carved in the intervals between the branches (lines 58–61).

Many other particulars regarding the ornamental tree are expressly left to the choice and discretion of the artists :

Evaṁ tu kalpa-vṛikshaḥ syāt śeshaṁ yuktyā prayojayet ।
Tasya madhye cha raṅge tu muktikena prapānvitam ।
Tan-madhye śāsanādīnāṁ toraṇaṁ kalpa-vṛikshakam ।

(*M.*, XXXIV, 167, 218–219.)

A carving on the car :

Kalpa-vṛiksha-yuta-chakravartibhir maṇḍitaṁ kuru sarvavedibhiḥ ।

(*M.*, XLIII, 169–170.)

The materials of which the tree is constructed :

Siṁhāsanaṁ makara-toraṇa-kalpa-vṛiksham ।
Mukta-prapāṅgam api dāru-śileshṭakādyaiḥ ।
Ratnair aneka-bahu-loha-viśeshakaiś cha (kuryāt) ।

(*M.*, XLVII, 30–33.)

Paśchāt siṁhāsanādhyaiś cha kalpa-vṛikshaṁ cha toraṇam ।

(*M.*, XLIX, 185.)

Padma-pīṭhaṁ mahā-pīṭhaṁ tri-mūrtīnāṁ cha yojayet ।
Prapā cha toraṇaṁ vāpi kalpa-vṛikshaṁ cha saṁyutam ।

(*M.*, II, 86–87.)

Apare tu niryūhaṁ kuryān makara-toraṇam ।
Tad-ūrdhve kalpa-vṛikshaṁ syāt sa-ha(? ga)jendra-śva(? sva)raiḥ saha ।—(*M.*, LV, 79–80.)

(2) ' (He) covered with fine gold the enclosure, the gate-towers, halls and buildings surrounding the shrine of pure gold . . . covered with splendid gold the altar on which offerings abound . . . covered with pure gold and adorned with numerous strings of large round pearls the sacred car temple . . . was pleased to build a long temple street of mansions covered with jewels and called it after his royal prosperous name, and made numberless splendid insignia, beginning with dishes

cut off fine gold, together with a kalpa (tree) of pure gold.'—(Inscrip. at Tirumalavadi, no. 79, lines 14–23, *H.S.I. I.*, Vol. III, p. 185.)

Doshonmosha-vṛisha-praghosha-divishat-santosha-posha-kshamaḥ
saṁyā-tātula-tīrtha-bhūta-parishat-satkāra-kalpa-drumaḥ ।
Nānā-maṅgala-divya-vastu-nivṛitas taurya-trikollāsito hṛidyaḥ ko'pi
sa vāsaraḥ samabhaval-loka-pramodojjvalaḥ ॥

(Inscrip. from Nepal, no. 23, Inscrip. of Queen Lalita-tripura-sundari, v. 4, *Ind. Ant.*, Vol. IX, p. 194.)

KALYĀṆA—A class of the five-storeyed buildings (same as GṚIHA-KĀNTA).

(*M.*, XXIII, 30–32 ; *see* under PRĀSĀDA.)

KALYĀṆA-MAṆḌAPA—A wedding pavilion.

(*See* details under MAṆḌAPA.)

KAVĀṬA—The leaf or panel of a door, a door.

(1) *Vāstu-vidyā* (ed. Gaṇapati Śāstrī) XIV, 1 :

Kavāṭa-dvitayaṁ kuryān mātṛi-putry-abhidhaṁ budhaḥ ॥

(2) *Kauṭilīya-Artha-śāstra*, Chap. XXIV, p. 53 :

Tri-pañcha-bhāgikau dvau kavāṭa-yogau ।

(3) *Kāmikāgama*, LV :

Deva-dvija-narendrāṇāṁ kavāṭa-yugalaṁ matam ।
Anyayor ekam uddishṭaṁ maha-dvāre chatur-yugam ॥ (51)
Aneka-śṛiṅkhalopetaṁ bāhu-kuṇḍala-bhushitam ।
Kavāṭa-yugmaṁ kartavyaṁ kokilārgala-saṁyutam ॥ (2)
Bhitti-madhyād bahis tasyā(ḥ) stambha-yoga-kavāṭaMyuk ।
Kavāṭa-yugalaṁ vā-ekaṁ ghāṭanodghāṭaṁ samam ॥ (166)

See also verses, 38, 49, 53.

Jālakaś cha kavāṭaś cha bāhye bāhye prakalpayet ॥ (*Ibid.*, XLI, 8).

(4) *Rāmāyaṇa*, VI, 31, 27, etc. :

Purīṁ mahā-yantra-kavāṭa-mukhyām ।

(5) *Mānasāra* :

Yon(g)yaṁ kavāṭa-yugmaṁ cha śreshṭhaṁ madhyaṁ cha harmyake।
(*M.*, XIX, 152.)

Dakshiṇe cha kavāṭe tu dvāraṁ kuryāt tu mukhyake ।
Devānāṁ cha manushyāṇāṁ mahā-dvāraṁ kavāṭake ।
(*M.*, XXXVIII, 9, 11.)

As compared with ' prākāra ' :

Dakshiṇasya kavāṭaṁ tu viśālādhikam āyataḥ ।
Eka-dvi-tryaṇgulaṁ vāpi kavāṭaṁ syāt dvi-hastakam ।
Kuryāt kavāṭa-dīrgheshu kshepaṇaṁ vistṛito'dhikam ।
Prākāre cha mahā-dvāraṁ kshudra-dvāraṁ kavāṭake ।

(*M.*, XXXIX, 101, 102, 108, 115; *see also* 124-137.)

(6) 'He, the emperor of the south, caused to be made of stone for Vijayanārāyana temple, latticed window, secure door-frame (dṛidha-kavāṭaṁ) door-lintel, kitchen, ramparts, pavilion, and a pond named the Vasūdeva tīrtha.'—(*Ep. Carnat.*, Vol. v, Part 1, Belur Taluq, no. 72, Transl., p. 61 ; Roman text, p. 142, line 7.)

KAŚA—
KAŚPU— } A mat, a cushion, a golden seat.

(*R.-V.* x, 100, 10 : *Taitt. Aran.*, VI, 9, 1 : *A.-V.* VI, 138, 5.)

KĀKĀSHṬA—A synonym of paryaṅka or bedstead, a couch of eight-fold crow design.

(*M.*, III, 11-12; *see* under PARYAṄKA.)

KĀCHA—A house with a southern and northern hall.

(*Bṛihat-Saṁhitā*, LIII, 40.)

KĀNTA—A type of pavilions.

(*M.*, XXXIV, 513-516 ; *see* under MAṆḌAPA)

KĀNTĀRA—A large forest, a difficult road, a class of six-storeyed buildings.

(*M.*, XXIV, 13-14 ; *see* under PRĀSĀDA.)

KĀMA-KOSHṬA—A comfortable compartment, usually a bedroom, a temple of one of the thirty-two attendant deities.

Jayante bhāskaraṁ sthāpya(m) īśe pāśupataṁ tathā ।
Athavā kāma-koshṭhaṁ syād ālayaṁ kalpayet sudhiḥ ।
Dvātriṁśan mūrtir evaṁ vā kuryāt tu parivārakam ।

(*M.*, XXXII, 58-60.)

KĀMĀKSHĪ-DHARMA-MAṆḌAPA—A type of pavilions.

(Madras Museum Plates of Śrīgiri-bhū-pāla, vv. 21-22
Ep. Ind., Vol. VIII, pp. 311, 316 ; *see* under MAṆḌAPA.

KĀMYA—A class of buildings, a chamber in the shrine used as bedroom of deities.

Pañcha-prākāra-harmyāṇāṁ adhunā vakshyate kramāt ।
Kāmyādi-bheda-harmyāṇāṁ tan-mānena vinyaset ।—(*M.*, XXXI, 2-3.)
Nitya-naimittikākhyādi-kāmyair api cha sarvabhiḥ ।—(*M.*, XLVIII, 27.)

KĀRĀPAKA--Persons appointed to look after the construction of a temple.

Kārāpakas tu sūnuḥ pitāmahākhyasya satya-devākhyaḥ ।
Goshṭhyā prasādaparayā nirupito janmanā sa vaṇik ॥

'The Kārāpaka selected by the goshṭhi (assembly) to see this work through was Satyadeva, the son of Pitāmaha, who was a merchant by birth.' Dr. Bhandarkar also refers to Prof. Kielhorn (*Ind. Ant.*, Vol. xix, p. 62, no. 53), 'persons appointed to look after the construction of the temple.'

(Vasantagadh Inscrip. of Varmalata, v. 9, *Ep. Ind.*, Vol. ix, pp. 192, 189, notes 4 and 3.)

Cf. Gomanasa Karavakasa ।

'The gift of Gomāna the Karavaka' (=kārāpaka).

(Four early Inscrip. no. B, *Ep. Ind.*, Vol. xii, p. 301.)

KĀRMUKA—A kind of village. It is situated on the banks of a river or sea (nadī-tīre'bdhi-tīre vā kārmukam cha vinyaset). Its plan is like a bow (tad-dyayor vīthi-bāhye tu kārmukākāravat pṛithak). *See* further details under Grāma.

(*M.*, ix, 3, 459, 463, 452-472.)

KĀRYA-SĀTRA—Working lines, the plumb-lines drawn for the purpose of the sculptural measurement.

(*M.*, lxvii, 93 ; *see* under Pralamba.)

KĀḶA-KŪṬA—A kind of poison, the cobra represented on the neck of the image of Śiva.

Grīvasya vāma-pārśve tu kāḷa-kūṭa-samanvitam ।—(*M.*, li, 80.)

KĀLA-MUKHA—A kind of phallus.

(*M.*, lii, 2, lxviii, 2 ; *see* under Liṅga.)

KĀLIṄGA-(KĀNTA)—A class of the twelve-storeyed buildings once prevailing in the country along the Coromandal coast.

Madhya-kāntam iti proktaṁ tasya kuṭa-dvi-bhāgike ।
Anu-śālā shaḍ-aṁśaṁ syāt tasyāṅgaṁ pūrvavad bhavet ।
Evaṁ kāliṅga-kāntam syān nānākārāṅga-saṁyuktam ।

(*M.*, xxxi, 14-16.)

KIRĪṬA—A diadem, a crown, a tiara.

Devānāṁ bhū-patīnāṁ cha mauli-lakshaṇam uchyate ।
Jaṭā-mauli-kirīṭaṁ cha karaṇḍaṁ cha śirastrakam ।

(*M.*, XLIX, 12–13.)

Kirīṭa-makuṭaṁ chaiva nārāyaṇāṁśa-yogyakam ।—(*Ibid.*, 18.)

KIṀBARA(-RĪ)—A crocodile, a shark, used both as an architectural and sculptural object.

Chitra-toraṇam . . . grāha-kiṁbara-saṁyuktam ।

(*M.*, XLVI, 52–53.)

Śyāma-varṇaṁ mukhaṁ sarvaṁ kiṁbarī-makarānanam ।

(*M.*, XVIII, 311.)

In connexion with the śālās or buildings :

Sarve(a)-śālā-nāsikā-toraṇādyaiḥ ।
Patraiś chitraiḥ kiṁbarī-vaktra-yuktam ।—(*M.*, XXXV, 401–402.)

In connexion with the single-storeyed buildings :

Nāsikāgrāntaṁ sarvaṁ kiṁbarī-samalaṅkṛitam ।—(*M.*, XIX, 36.)

KISHKU—A measure, a cubit of 24 or 42 aṅgulas.

Kishku(ḥ) smṛito dvi-ratnis tu dvi-chatvāriṁśad aṅgulaḥ ।

(*Brahmāṇḍa-Purāṇa*, Part I, 2nd Anushaṅga-pāda, Chap. VII, v. 99.)

But according to the *Suprabhedāgama* (XXX, 25 ; *see* under AṄGULA), it is a cubit of 24 aṅgulas, which in the above Purāṇa (v. 99) is called 'aratni.'

KĪRTANA (also KĪRTTANA)—A temple, a shrine.

(1) S(ś)aṁbhor yo dvā-das(ś)āpi vyarachayad achirāt kirttanāni —'who erected (soon) twelve temples of Sambhu.' 'Mr. Telang at the suggestion of Pandit Bhagvan Lal'.

(New Silāra copper plate grant, line 7, *Ind. Ant.*, Vol. IX, pp. 34, 36, and note 13.)

(2) Kartāpi yasya khalu vismayam āpa śilpi tan-nāma-kīrttanam akāryyata rājñā ।

'This is the abode of Svayaṁbhu Śiva, and no artificially made (dwelling) ; Śrī (if she could be) seen (would be) such as this. Verily even the architect who built it felt astonishment, saying " (the utmost) perseverance would fail to accomplish such a work again ; aho ! how has it been achieved by me ? " (and), by reason of it the king was caused to praise his name.' Dr. Fleet.

(Skt. and Old Canarese Inscrip. no. CXXVII, line 14 f.; *Ind. Ant.*, Vol. XII, pp. 159, 163, c. 1.)

(3) Dr. Hultzsch referring to the passage quoted above says :

'The word, Kīrtana, has been understood in its usual and etymological sense by Dr Fleet and the first translator (*B.A.S.J.*, Vol. VIII, p. 292 f., Mr. Prinsep) ; that sense is not at all appropriate here and the word must be taken to signify a *temple*.' He then refers to the Śilāra grant mentioned above and quotes the following :

(*a*) Kīrtanāni cha kārayet ।

'Cause temples to be constructed.'—(*Agni-Purāṇa*, Bib. Ind., Vol. I, p. III.)

(*b*) Kurvan kīrtanāni lekhayan śāsanāni . . . prithivīṁ vichachāra—'he travelled the earth, . . . constructing temples, causing grants to be written, etc. (Bāna's Kādambarī).'

(*c*) Pūrta-kīrtanodharaṇena tu—'by the restoration of dilapidated works of public utility (such as tanks, wells, etc.) and temple.'

(*Ind. Ant.*, Vol. XII, pp. 228–229.)

(4) 'In addition to the authorities quoted by Bhandarkar in support of this meaning of Kīrttana (in no. 2 above), I have since found that it is used in the same sense in the five inscriptions of Devalabdhi, the grandson of the Chandella king Yaśovarman and the son of Kṛishṇapa and Asarvā, in the temple of Brahmā at Dudahi (*Arch. Surv. of Ind.*, Vol. X, Plate XXXII).'—Dr. Fleet.

(*Ind. Ant.*, Vol. XII, p. 289, c.2.)

(5) Achīkarat kīrttanam—'built temples.'—(Gwalior Inscrip. v. 15 *Ind. Ant.*, Vol. XV, pp. 203, 202, note 8.)

(6) Kīrttanam idaṁ sarvvaṁ kāritam (*a*. line 9 f.).
Kīrttanam idaṁ sarvvaṁ api (*b*. line 8 f.).
Sarvva-kīrttanam idam (*c*. line 5).
Śāktaṁ kirttanam idam (*d*. line 3).
Kīrttanam idam (*e*).

In all these places, 'Kīrttana' means a temple.—(Chandella Inscrip. no. A, Dudahi stone Inscrip. of Devalabdhi, a grandson of Yośovarman, *Ind. Ant.*, Vol. XVIII, p. 237.)

(7) *Cf.* Sa dakshiṇārkkasya . . . chakāra kīrttiṁ bahu-kīrttināthaḥ—'he famous for many (good) deeds made the temple of Dakshiṇārka'.

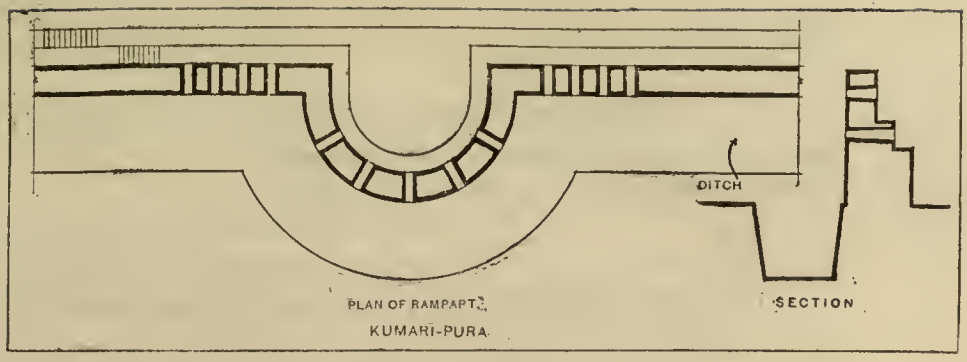
(Gaya Inscrip. of Vikrama-samvat 1429, lines 4–5, 8 ; *Ind. Ant.*, Vol. XX, pp. 314–315.)

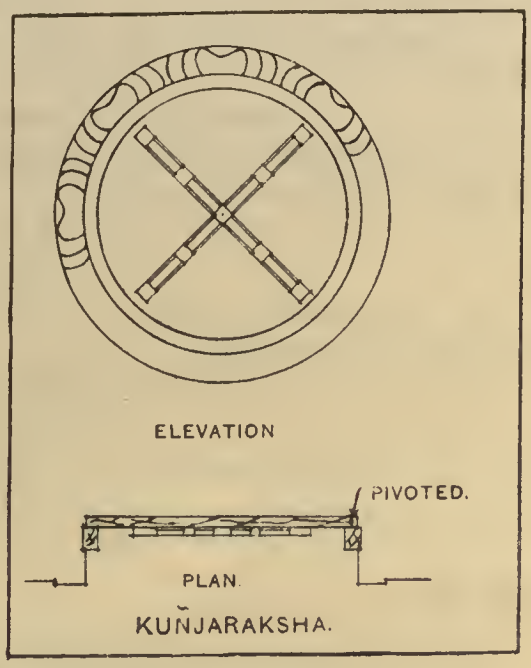
KĪRTI-VAKTRA—The monumental face, used as an architectural member.

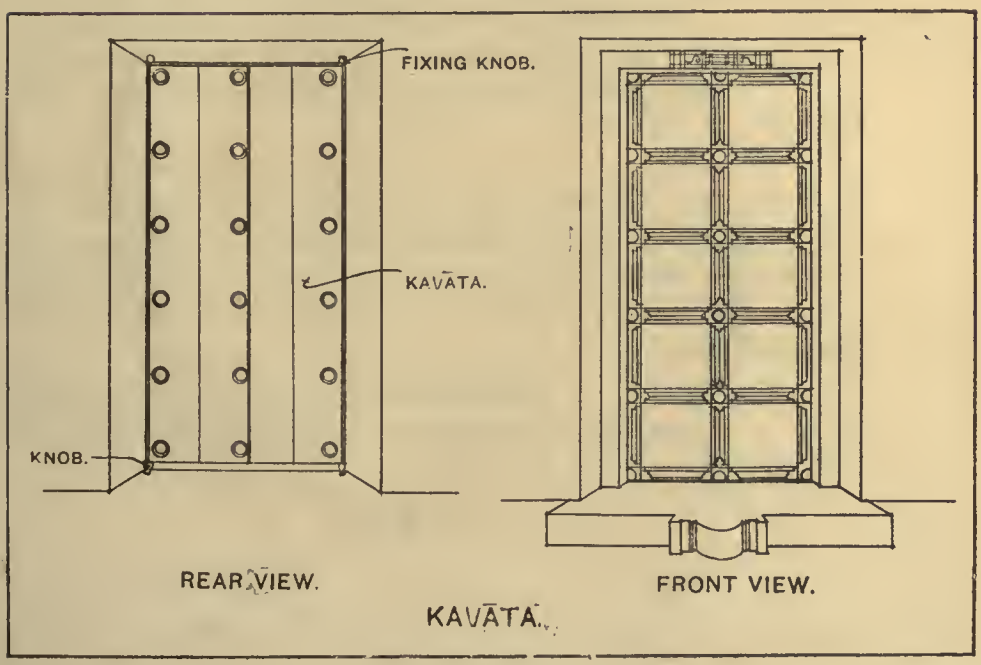
In connexion with the 'mukha-bhadra' or front tabernacle, porch or hall :

Tad-ūrdhve kīrti-vaktraṁ tu nirgamākṛiti(r) bhavet ।

(*M.*, XVIII, 293.)


DITCH
PLAN OF RAMPART.
SECTION
KUMARI-PURA.


ELEVATION
PIVOTED.
PLAN.
KUÑJARAKSHA.


FIXING KNOB.
KAVĀTA.
KNOB.
REAR VIEW.
FRONT VIEW.
KAVĀTA.

KĪRTI-STAMBHA—A memorial or monumental pillar.

(Ahmadabad Arch., Burgess, *Arch. Surv.*, New. Imp. Series, Vol. xxxiii, p. 94; *see* under STAMBHA.)

KĪLA—A stake, pin, nail, wedge, post.

Etat tu pratimaṁ bhavet ।
Kīla-tāra-samādy-ardhaṁ dvi-guṇaṁ vā galakā bhavet ।

(*M.*, xii, 122-123.)

In connexion with joinery :

Mūlāgre kīlakaṁ yuktam ardha-prāṇam iti smṛitam ।

(*M.*, xvii, 99.)

In connexion with a mirror or the looking-glass :

Darpaṇasya tri-bhāgaikaṁ mūle kīlāyataṁ tathā ।

(*M.*, l, 120 ; *see also M.*, xxxix, 121–123.)

KĪLA-BHĀJANA—The pin-hold.

In connexion with the door :

Kīla-bhājanam ity-uktam kīlānāṁ tu pravakshyate ।

(*M.*, xxxix, 119; *see also* 120–131.)

KĪLA-ŚŪLAKA—The pin-point.

In connexion with the door :

Kuryāt tat kavāṭānāṁ yuktyā tat kīla-śūlakam ।—(*M.*, xxxix, 128.)

KUKSHI—The belly, a cavity, the middle part, the interior, the hub of the wheel.

(*M.*, xlviii, 12.)

In connexion with the foundations :

Grāmādīnāṁ nagarādīnāṁ pura-pattana-kharvaṭe ।
Koshṭha-kolādī-sarveshāṁ garbha-sthānam ihochyate ।
Sthira-vāstu-kukshi-deśe tu chara-vāstu tathāpi cha ।
Grāma-dvārasya yoge vā garbha-śvabhraṁ prakalpayet ।

(*M.*, xii, 168–171.)

In connexion with the pent roof (lupā) :

Tat-sūtrād adho deśe kukshiṁ jñātvā purordhvake ।—(*M.*, xviii, 236.)

In connexion with the front porch or tabernacle (mukha-bhadra) :

Pañchāṁśa-dvi (-ya)ṁśa-tāraṁ syād ardhaṁ vā kukshi-vistṛitam ।
Kukshy-antaraṁ sadma-saṁyuktaṁ vātāyanam athāpi vā ।

(*Ibid.*, 286–287.)

In connexion with the single-storyed buildings :

Nāsī-tāraṁ tri-bhāgaikaṁ kukshshī-tāram iti-smṛitam ।

(*M.*, xix, 37.)

In connexion with the chariot (ratha) :

Vistāraṁ cha tridhā kṛitvā madhye kukshy(im)-aṁśakena tu ।
Pañcha-daśaṁ cha vipulaṁ nālaṁ kuksh(as)yā veśanam ।

(*M.*, XLIII, 12, 14.)

In connexion with the arch :

Ratnakārāṅgaṇair yuktaṁ kukshir āvṛita-lambitam ।
Toraṇasyopari deśe tu bhujaṅga-pāda dvayor api ।

(*M.*, XLVI, 59.)

Mukhaṁ vakshaś cha kukshiś cha kaṭi-dīrghe dvā-daśāṁśakam ।

(*M.* LVII, 55.)

Kukshi-tārāshṭa-matraṁ syāt . . . ।—(*M.*, LX, 14.)

KUKSHI-BANDHA—A class of bases, it has four types differing from one another in height and the addition or omission of some mouldings.

(*M.*, XIV, 319-359 ; *see* under ADHISHṬHĀNA.)

KUCHA-BANDHANA—An ornament for the (female) breast.

Kucha-bandhana-sāṁyuktaṁ bāhu-mālā-vibhūshiṇī

(*M.*, LIV, 12.)

KUÑJARA—A type of building which is shaped like the elephant's back, 16 cubits long and broad at the bottom and has a roof with three dormer-windows.

(1) *Bṛihat-Saṁhitā* (LVI, 25, *J. R. A. S.*, N. S., Vol. VI, p. 319).
(2) *Matsya-Purāṇa* (Chap. CCLXIX, vv. 36, 41, 49, 53 ; *see* under PRĀSĀDA).
(3) *Bhavishya-Purāṇa* (Chap. CXXX, v. 32 ; *see* under PRĀSĀDA).

KUÑJARĀKSHA (*cf.* VĀTĀYANA)—A window resembling the elephant's eye in design.

Nāga-bandhaṁ tathā vallī gavākshaṁ kuñjarākshakam ।
. . . eshāṁ vātāyanaṁ rūpam ।—(*M.*, XXXIII, 581, 582, 585.)
Gavākshākāraṁ yuktyā cha paṭṭikordhve samantataḥ ।
Kuñjarāksham alakshaṁ vā patra-pushpādy-alaṅkṛitam ।

(*M.*, XLIV, 22, 23.)

KUṬI (*see* GANDHA-KUṬI)—A hall, a cottage, cornice, entablature.

Kosaṁba-kuṭi—'The hall at Kausāmbi.'—Dr. Hultzsch—(Bharaut Inscrip. no. 39 ; *Ind. Ant.*, Vol. XXI, p. 230).

KUṬIKA—A village under one headman.

Eko grāmanīko yatra sa-bhritya-parichārakah ।
Kuṭikaṁ tad vijānīyād eka bhogah sa eva tu ॥

(*Kāmikāgama*, XX, 4.)

KUṬUMBA-BHŪMI—The ground for houses, a site where a house is built.

Kuṭumbha-bhūmi-mānaṁ tu vāṭa-kshetra-vivarjitam ।

(*Ibid.*, XXI, 3.)

KUṬṬIMA—A floor, a base, a wall, a pavement, an entablature, a cottage, a small house, the ground prepared for the site of a building, a paved ground.

It is also used as a synonym of Prastara or entablature.—(*M.*, XVI, 2-4 ; *see* under PRASTARA.)

(1) Same as adhishthāna or the base of a column :

Adhishthāna-vidhīṁ vakshye śāstri saṁkshipyate' dhunā ।
Trayodaśāṅgulam ārabhya shaṭ-shad-aṅgula-vardhanāt ।
Chatur-hastāvasānaṁ syāt kuṭṭima-dvādaśonnatam । (*M.*, XIV, 1-3.)
Janmādi-vājanāntaṁ syāt kuṭṭimodayam īritam ।—(*Ibid.*, 9.)
Vimāna-śāleshu cha maṇḍapeshu ।
Nidhāna-sadmeshv-api gopureshv-api ।
Eteshv-adho-deśa-talopapīṭhe ।
Tasyoparishṭhāt kṛita-kuṭṭimāni ।—(*Ibid.*, 397-400.)

Referring to the entablature :

Shaḍ-vidhaṁ kuṭṭimottuṅgaṁ prastarodayam īritam ।—(*M.*, XVI, 4.)

In connexion with the four-storeyed buildings :

Tad-ūrdhve pāda(ṁ)-bandhvaṁśaṁ gopānochchaṁ tad-ardhakam ।
Tad-ūrdhve kuṭṭimaṁ chāṁsaṁ sārdha-pakshāṅghri-tuṅgakam ।

(*M.*, XXII, 36-37.)

In connexion with the gopura or gate-house :

Dvi-bhāgaṁ chopapīṭhochchaṁ tasmād ekāṁśa(ṁ) kuṭṭimam ।

(*M.*, XXXIII, 249.)

(2) As a synonym of the wall (bhitti) :

. . . dvāri kuṇḍaṁ cha kuṭṭiman ॥
Bhitter akheyeyam akhyātam . . . ॥—(*Kāmikāgama*, LV, 199-200.)

As a member (*lit.* limb) of the base :

Masūrakam adishṭhānaṁ vastvādhāraṁ dharātalam ।
Talaṁ kuṭṭimādy-aṅgam adhiṣṭhānasya kīrtitam ॥—(*Ibid.*, 202.)

(3) Prāsāda-śata-sambādhaṁ maṇi-pravara-kuṭṭimam ।
Kārayāmāsa vidhivad dhema-ratna-vibhūshitam ॥

(*Mahābhārata*, XIV, 25, 22.)

. . . prāsādaiḥ sukṛitochhrayaiḥ ॥
Suvarṇa-jāla-saṁvṛitair maṇi-kuṭṭima-bhūshaṇaiḥ ॥

(*Ibid.*, I, 185, 19–20.)

(4) Kuṭṭimo'strī nibaddhā-bhūś chandra-śālā śirogṛiham ।
Commentary : Pāshāṇādi-nibadhhā-bhuḥ sa kuṭṭima ity-ckam ।

(*Amarakōsha*, II, 5–8.)

(5) Gṛihaṁ kāñchana-kuṭṭimam ।—(*Rāmāyana*, VI, 37, 27, etc.)

(6) Tan . . . pathi . . . mamlatur na maṇi-kuṭṭimochitau ।

(*Raghuvaṁśa*, ed. Stenzler, II, 9.)

(7) Pādāṅgushṭhālulita-kusume kuṭṭime ।

(*Māḷavikāgnimitra*, ed. Tullberg, II, 27.)

(8) Vedikeyaṁ tu sāmānyā kuṭṭimānām prakīrititā ।

(*Vāstu-vidyā*, ed. Gaṇapati Śāstri, IX, 19.)

(9) Maṇi-kuṭṭima—'jewel-paved floor.'—(Kadaba plates of Prabhutavarsha, line 29 ; *Ep. Ind.*, Vol. IV, pp. 341, 342.)

(10) Vāpī-kūpa-taḍāga-kuṭṭima-maṭha-prāsāda-satrālayān ।
Sauvarṇa-dhvaja-toraṇāpaṇa-pure-grāma-prapā-maṁḍapān ॥
. . . . vyadhāpayad ayaṁ Chaulukya-chūḍā-maṇiḥ ।
Here 'kuṭṭima' is evidently a detached building.

(Śrīdhara's Devapattana Prasasti, v. 10; *Ep. Ind.*, Vol. II, p. 440.)

(11) Maṇi-kuṭṭima—'jewel-paved floor.' 'And it must have been an uncommonly magnificent building, for nearly the sixth part of whole inscription (of 103 lines) is devoted to its description, and its erection is the only deed of the king, which the author has thought worth mentioning. The temple spoken of here must, therefore, necessarily be that splendid Śiva temple which, according to the Baroda-grant was built by Kṛishṇa on the hill of Etāpura, the modern Elurā.'—(Kadaba plates of Prabhutavarsha, line 34, *Ep. Ind.*, Vol. IV, p. 337 and note 2 ; *Ind. Ant.*, Vol. XII, p. 159 and p. 228 f.)

(12) Śrīkṛishṇa-kshiti-pāla-datta-maṇibhir vidvat-kavīnāṁ gṛihā nānā-ratna-vichitra-kuṭṭima-bhuvo ratnākaratvaṁ gatāḥ—'Through the precious stones presented by the glorious king Kṛishṇa, the houses of the learned and the poets have pavements (? floor) sparkling with jewels of different kinds, and have (thus) become jewel-mines.'—(Two inscrip. of Krishnaraya no. A, Mangalagiri pillar, Inscrip. v. 7, *Ep. Ind.*, Vol. VI, pp. 118, 128.)

(13) Maṇi-kuṭṭima-vīthīshu muktā-saikata-setubhiḥ ।
Dānāmbūni niruṁdhānā yatra krīḍanti bālikāḥ ॥

'There the girls play on roads paved with precious stones, stopping by embankments of pearl and the water poured out at donations.'

(Vijayanagara Inscrip. of Harihara, II, v. 27, *H. S. I.*, Vol. I, no. 152, pp. 158, 160.)

(14) Lokaika-chūḍāmaṇinā maṇi-kuṭṭima-saṅkrāṁta-prati-bimba-vyājena svayam avatīryya . . . ।

'The sun . . . under pretence of seeing his reflection in the jewelled floor.'

(*Ep. Carnat.*, Vol. XII, Gubbi Taluq, no. 61 ; Roman text, p. 49, line 32 ; Transl., p. 29, line 20.)

KUḌYA—A wall, plastering.

Bhittiḥ strī kuḍyam ।
'Bhittiḥ kuḍye prabhede cha' iti Haimaḥ ।
'Kuḍyaṁ bhittau vilepane ' iti Medinī ।—(*Amarakōsha*, 2, 2, 4.)

(1) Prāsāda-harmya-valabhī-liṅga-pratimāsu kuḍya-kūpeshu ।

'In the temple, mansion, roof, phallus, image (idol), wall, and tank (the cement should be used).

(*Bṛihat-Saṁhitā*, LVII, 4, *J.R.A.S.*, N.S., Vol. VI, p. 322.)

(2) Śilayā cha mṛidāpy-athavā taruṇā rachayed atha kuḍyam atīva-dṛiḍham ।
Tad-ihottara-vistarataḥ sadṛiśaṁ bahalaṁ kathitaṁ talipādi-yutam ।
Svotsedha-darāṁśaika-hīna-mastakam eva tat ।
Kuḍyaṁ kuryād bahir-bhāgaṁ svāntar-bhāgaṁ bhavet samam ॥

(*Vāstu-vidyā*, ed. Gaṇapati-Śāstri, XV, 1-2.)

(3) Para-kuḍyam udakenopaghnato—' cause to collect water and thereby injure the wall of a neighbouring house.'

(*Kauṭilīya-Artha-śāstra*, Chap. LXV, p. 167.)

(4) Pañchālindaṁ shaṭ-kuḍyaṁ bahir āndhārikāvṛitam ॥
Liṅge śilānte cha krodhe bhitti(ḥ) pañchāśa-varjitaḥ ।
Kiṁchin nyūnam alindaṁ vā śeshaṁ kuḍyeshu yojayet ॥

(*Kāmikāgama*, L, 83, 87.)

Jālakaṁ phalakaṁ śailam aishṭaṁ kuḍyaṁ cheshyate ।
Jālakair bahubhir yuktaṁ jālakaṁ kuḍyam ishyate ॥
Nishpādaṁ vā sa-pādaṁ vā kuḍyam śailam atheshṭakam ।
Athavā mṛiṇmayaṁ vāpi kuḍyam ishṭaṁ dvijottamāḥ ॥

Kuḍye stambha-latā karyā vastvādhārasya chopari ।
Vedikordhvādhāre kūṭa-koshṭādīnāṁ tridhā tridhā smṛitaḥ ॥

(*Kāmikāgama*, LV, 94, 97, 98.)

Jālakā cha kavāṭaś cha bāhye bāhye prakalpayet ।
Sarvataḥ kuḍya-saṁyuktaṁ mukhya-dhāmātra kīrtitam ॥
Anta-vivṛita-pādaṁ cha bāhye kuḍyaṁ prakīrtitam ॥
Bahir abhyantare mukhya-gehaṁ vidhīyate ॥—(*Ibid.*, XLI, 8, 9, 14.)

(5) In connexion with the number of walls (sāla) in the buildings of the kings of various ranks :

Ekādikaṁ tri-sālāntaṁ paṭṭadharādibhis tribhiḥ ।
Prāhārakāstragrāhābhyāṁ kuḍyam etad (? ckaṁ) dvayāntakam ॥

(*M.*, XL, 42-43.)

Geha-tridhaika-parito bahi(ḥ) kuḍya-tāram ।—(*M.* LIII. 59).
Kuḍyā(ama)ty-adhika-hīnaṁ ched vistāre chodaye'pi vā ।
Dvi-jāti-sarva-varṇānāṁ sarva-nāśakaraṁ bhavet ।

(*M.* LXIX. 57, 58.)

KUḌYA-STAMBHA—The column of the wall, thus the pilaster or a square pillar projecting from the wall.

Śilā-stambhaṁ śilā-kuḍyam narāvāse na kārayet ॥

(*Kāmikāgama*, XXXV. 161.)

In connexion with the foundations :

Kuḍya-stambhe gṛiha-stambhe harmya-garbhaṁ vinikshipet ।

(*M.* XII. 132.)

Referring to the pillar :

Tri-chatush-pañcha-shaṇ-mātraṁ kuḍya-stambha-viśālakam ।
Tad-dvi-guṇitaṁ vāpi tri-guṇaṁ vā chatur-guṇam
Etat(s) kampa(-bha)-viśālaṁ syād athavā tuṅga-mānataḥ ।

(*M.* XV. 14–16.)

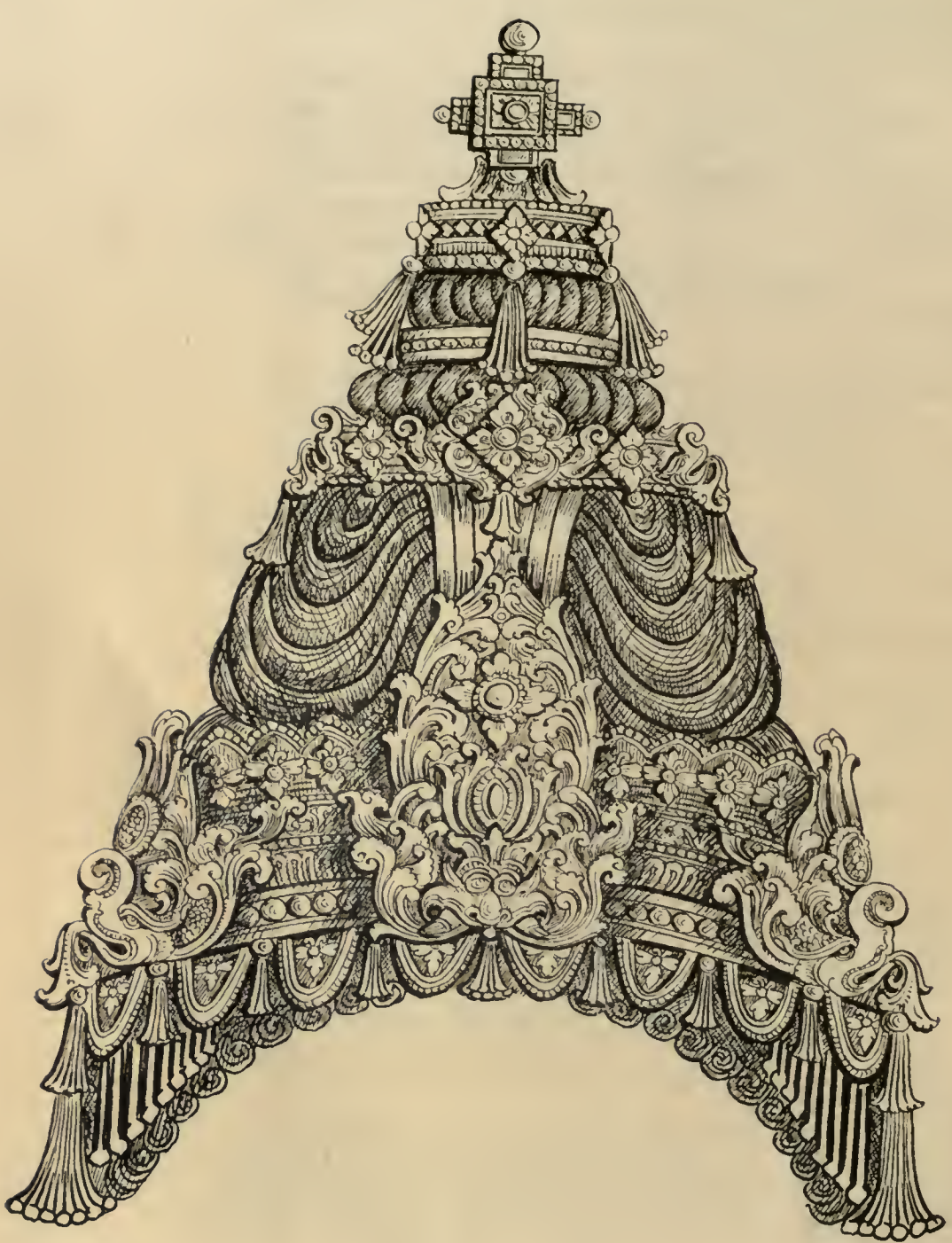
See Chalukyan Architecture, *Arch. Surv.* New Imp. series, vol. XXI, plates XVI, XLVI, fig. 3 ; plate LXXVIII, figs. 1, 2 ; Buddhist Cave Temples, *ibid*, vol. IV, plate XVIII, no. 3 ; plate XXII, no. 2 ; plate XXIX. no. 2.

KUṆḌA—A pool or well in or about a temple.

Sarvataḥ kuṇḍa-saṁyuktaṁ gṛiha-dvāra-samanvitam ।

(*Kāmikāgama*, XXXV. 64.)

'At Kapaḍvanj . . . is a large spuare kuṇḍa or reservoir in the market place. This occupies an area about a hundred feet square with a platform below the first descent, from which a series of short stairs, parallel to the sides, lead down from one narrow landing to another,



KUNTALA

and reaching a broader one about 33 feet from the first. Between each pair of descending steps in each of five tiers is a niche—some hundred and thirty-six in all—originally occupied by images . . . In the centre is a deep well about nine and a half feet square.'

(Ahmadabad Arch., Burgess, *Arch. Surv.* New. Imp. series, vol. xxxiii, p. 94, plates lxxx, lxxxi.)

KUṆḌIKĀ—A water pot on the hand of an image.

Kuṇḍikā chāksha-mālā cha vāme vāme kare kramāt ।—(*M.* li. 31.)
Kuṇḍikā vāma-haste cha dhārayet tu sarasvatī ।—(*M.* liv. 22.)

KUNTALA—A head gear, a lock of hair.

Devānāṁ bhūpatīnāṁ cha mauli-lakshaṇam uchyate ।
Jaṭā-mauli-kirīṭaṁ cha karaṇḍaṁ cha śirastrakam ।
Kuntalaṁ keśa-bandhaṁ cha dhammillālaka-chūḍakam ।
Mukuṭaṁ cheti khyātam . . . ।—(*M.* xlix 12–15).
Dukūla-vasanopetaṁ mukuṭaṁ kunu talaṁ tvā ।—(*M.*, liv, 78.)
Kechit tu kuntala-nibhaṁ tuṅgaṁ makuṭaṁ kuntalaṁ tu vā ।

(*Ibid.*, 119.)

KUBJAKA (*see* Nagara)—Hump backed, crooked, a town of the similar plan (*cf.* Kānya-kubja), according to the *Kāmikāgama*, it is a suburb or a place on the confines of any city or large village.

Grāmādīnāṁ samīpaṁ yat sthānaṁ kubjam iti smṛitam ॥

(*Kāmikāgama*, xx, 15.)

Sarveshāṁ nagarādīnāṁ bhedaṁ lakshaṇaṁ uchyate ।
Kubjakaṁ pattanaṁ chaiva . . . ।
. . . durgam ashṭa-vidhaṁ bhavet ।—(*M.*, x, 37, 40, 42.)

KUMĀRĪ-PURA—A gymnasium or school for higher studies, a stadium, arena or sports ground.

Sotsedha-randhra-prākāraṁ sarvataḥ khāṭakāvṛitam ।
Ruchaka(ḥ)-pratika-dvāraṁ kumārī-puram eva cha ॥
Dvi-hastaḥ srotasā śreshṭhaṁ kumārī-puram añchatām ।
Hasta-śato-daśa-śreshṭho navahasto'shṭa eva cha ॥

(*Brahmāṇḍa-Purāṇa*, Part i, 2nd Anusaṁga-pāda Chap. vii, vv. 103, 104.)

Prākāra-madhye kritvā vāpīṁ pushkariṇīṁ dvāraṁ chatuś-śālām adhyardhāntarānikaṁ kumārī-puraṁ muṇḍa-harmyaṁ dvi-talaṁ muṇḍaka-dvāraṁ bhūmi-dravya-vaśena vā tribhāgādhikāyāmāḥ bhāṇḍa-vāhinī(ḥ)-kulyāḥ kārayet ।—(*Kauṭilīya-Artha-śāstra*, xxiv, 54, *see* Translation under Chūli-harmya.)

KUMUDA—The water-lily. 'A semi-circle projecting from a vertical diameter. It is chiefly employed in cornices and bases. It corresponds with the astragal (a small circular moulding ornamented with a bead or reel), or with torus' (a large convex moulding used principally in the bases of columns). (Rām-Rāz, *Arch. Hind.*, p. 23.) In bases it may be triangular or hexagonal.

(*M.*, XIV, 83.)

In connexion with the foundations :

Janmāntaṁ vāthavā prāntaṁ kumudāntaṁ vā galāntakam ।
Paṭṭikāntaṁ kshipech chāpi vinyaset prathameshṭakam ।

(*M.*, XII, 202-203.)

A moulding of the base (*M.*, XIV, 12, etc.; *see* the lists of mouldings under ADHISHṬHĀNA).

A moulding of the throne :

Tach-chhesharh dvi-bhāge tu kumudaṁ vṛittākṛitis tathā ।

(*M.*, XLV, 136.)

A headgear

Eteshāṁ mahishbībhyāṁ(-shyoḥ) cha dhammilla(ṁ) kumudākṛitam ।—(*M.*, XLIX, 28.)

KUMUDA-BANDHA—A class of bases, it has four types differing from one another in height and in the addition or omission of some mouldings.

(*M.*, XIV, 65-108, *see* under ADHISHṬHĀNA.)

KUMBHA (*see* KALAŚA)—A pitcher, the capital, a moulding, the cupola, a plinth. (*M.*, XIV, 33, etc., *see* the lists of mouldings under ADHISHṬHĀNA). A kind of building (*see* under GHAṬA).

A part of a column (*Suprabhedāgama*, XXXI, 58, *see* under STAMBHA). A pinnacle :

Prāsādam apy-amala-kañchana-kumbha- aṁpāta-saṁbhāvanīyam-akarod anukarmma śilpaiḥ ।—(Chebrolu Inscrip. of Jaya, postscript, lines 9-11, *Ep. Ind.*, Vol. v, pp. 150, 151.)

Ghanaṁ prāsādaṁ nava-hema-kumbha-kalitaṁ ramyaṁ māhāmaṁṭapaṁ—'a solid temple adorned with nine golden pinnacles and a beautiful large hall.'—(Mangalagiri Pillar Inscrip., v. 51, *Ep. Ind.*, Vol. VI, pp. 125, 115.)

Prottuṁge'py-aparājiteśa-bhavane sauvarṇṇa-kumbha-dhvajāropī rūpyaja-mekhalā-vitaraṇas tasyaiva devasva yaḥ . . . ।

'He placed a golden cupola (kumbha) and a flagstaff (dhvaja) on the temple of (the god) Aparājiteśa, to whom at the same time he gave a silver girdle.'—Pro. Kielhorn.

(The Chahamanas of Naddula, no. C, Sundha Hill Inscrip. of Chāchigadeva, v. 51, *Ep. Ind.*, Vol. IX, pp. 78, 74.)

Prāsādam ūrdhva-s(ś)ikhara-sthira-hema-kumbham— '(Into) the temple (which by the stately display of) firm golden capital, upon lofty spires.'—(Bhubaneswar Inscrip., v. 15, *Ep. Ind.*, Vol. XIII, pp. 152, 154.)

KUMBHAKA—The base of a column.

Ayaṁ kumbhaka-dānam . . . . 'This pillar-base (where the inscription is written) is the gift of . . . '

The same inscription is repeated on many other bases of pillars.

(Catalogue of the Arch. Museum at Mathura, sections 21, 22, 25, 30, 32, pp. 176, 177, 178.)

KUMBHA-PAÑJARA (*cf.* PAÑJARA)—A niche in the wall. It consists of a vase, a pilaster and a little pavilion (pañjara) at the top.

KUMBHA-PĀDA (*cf.* STAMBHA)—Literally the pillar at the foot of a pitcher, an upper pillar of the two-storeyed buildings (*M.*, XX, 63), of the bedstead (*M.*, XLIV, 59).

KUMBHA-BANDHA—A class of bases, it has five types differing from one another in height and in the addition or omission of some mouldings.

(*M.*, XIV, 195–239 ; *see* under ADHISHṬHĀNA.)

KUMBHĀLAṄKĀRA—Ornaments of the column, mouldings of the pedestal, base, and entablature.

(*M.*, XV, 201–232 ; *see* under UPAPĪṬHA, ADHISHṬHĀNA and PRASTARA.)

KUMBHA-STAMBHA (*see* STAMBHA and compare KUMBHA-PĀDA)—A small pillar, generally employed at the upper part of a structure.

(*M.*, XV, 72–200 ; *see* under STAMBHA.)

KULA (*see* ACHARYA-KULA)—A residence, a residential private school, a dwelling house of a small individual family (*R.-V.*, X, 179, 2 ; *A.-V.*, I, 14, 3 ; *Śat. Brāhmaṇa*, I, 1, 2, 4 ; II, 1, 4, 4 ; 4, 1, 14 ; XI, 5, 3, 11 ; 8, 1, 3 , *Bṛihat-Upanīshad*, 1, 5, 32 ; *Chhānd. Upa.*, III, 15, 6), a sanctuary, a temple.

KULA-DHĀRAṆA—A type of pavilion.

(*M.*, XXXIV, 262 ; *see* under MAṆḌAPA.)

KULĀMBHA-DVĀRA—A front door, the threshold.

(*M.*, XXXIV, 365.)

KULIKĀṄGHRI(KA) (*see* STAMBHA)—An ornament of the entablature, the main pillar, calyx, *see* NĀṬAKA.

Vallikā patra-vallī cha chitrāṅgaṁ kulikāṅghrikam ।
Etat paryāya-vākyāni . . . ।—(*M.*, XVI, 54-55.)

KULI(Ī)RA—A crab, a part of the joinery shaped like a crab.

(*M.*, XVII, 153.)

KUHARA—A window, the interior windows.

Tatra shaḍ-aśrir merur dvādaśa-bhaumo vichitra-kuharaś cha ।
Commentary : Kuharā abhyantara-gavākshaḥ ।

(*Bṛihat-Saṁhitā*, LVI, 20, *J.R.A.S.*, N. S., Vol. VI, p. 318.)

Merur dvādaśa-bhaumo vividha-kuharaś cha ।

(*Bhavishya-Purāṇa*, Chap. CXXX, V, 27.)

KŪṬA—The peak or summit, head, top of a building.

(1) The top of a building : karṇa-kūṭa, śālā-kūṭa.—(*M.*, XIX, 55, 57 ; XV, 134 ; LX, 45 ; LXX, 20.)

(2) Ekaika-bhāgaṁ syāt tu kūṭa-śālādikaṁ nayet ।
Adho bhāga-dvayenātha kūṭam ekena vā bhavet ।
Kūṭa-śālā (v. 92), mūla-kūṭa, vāṇa-kūṭa (95).

(*Kāmikāgama*, L, 88, 90, 92, 95.)

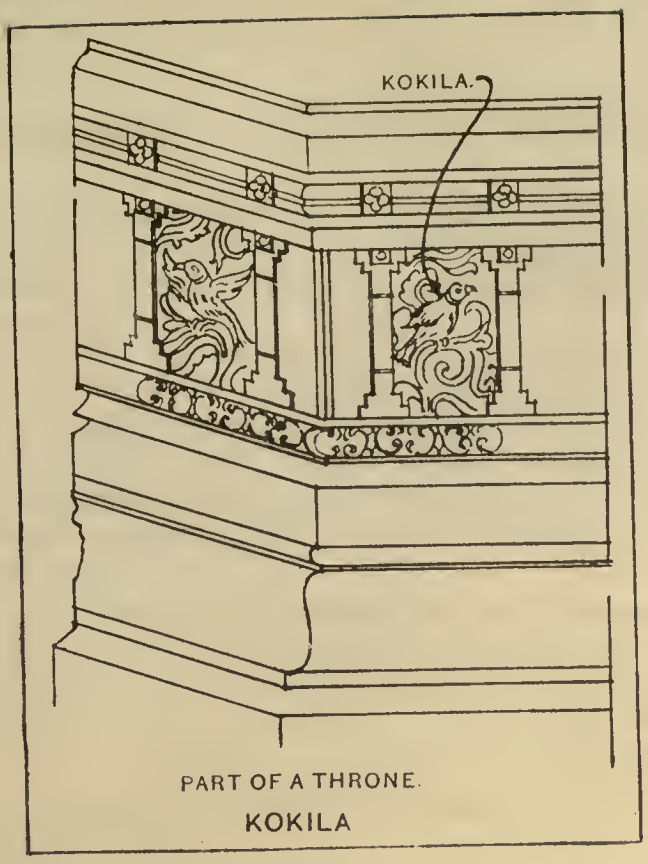
(3) Pinnacle : Māṭa-kūṭa-prākāra-khaṇḍa-sphuṭita-jīrṇoddhārakam —'for the repairs of whatever might become broken or torn or worn out belonging to the enclosure, with beautiful pinnacles'.—(Inscrip. at Ablur, no. E, lines 59, 76, *Ep. Ind.*, Vol. V, pp. 249, 257, 258.)

Śivāgamokta-vāge parvvata-pramāṇāda degulamaṁ tri-kūṭa vāge—'in accordance with Śiva traditions, founded a temple with three pinnacles, as vast as a mountain'.—(*Ibid.*, no. E, line 74, *Ep. Ind.*, Vol. V, pp. 250, 258.)

(4) Tārā-gaṇeshūnnata-kūṭa-koṭi-taṭārppitāsūjvala-dīpikāsu ।

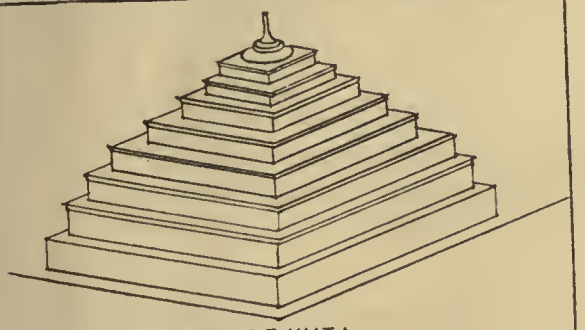
'Like clusters of stars the bright lamps be placed on its pinnacles.'

(*Ep. Carnat.*, Vol. XII, Gubbi Taluq, no. 61 ; Roman text, p. 49, lines 28 ; Transl., p. 29, line 17.)

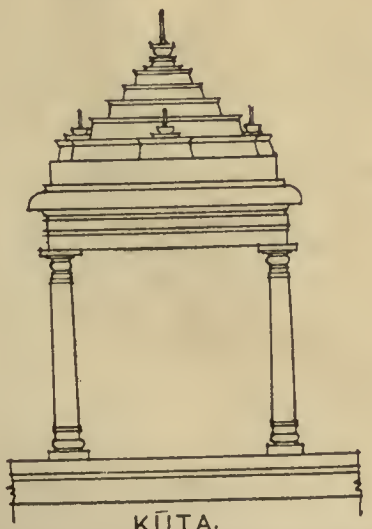


PART OF A THRONE.

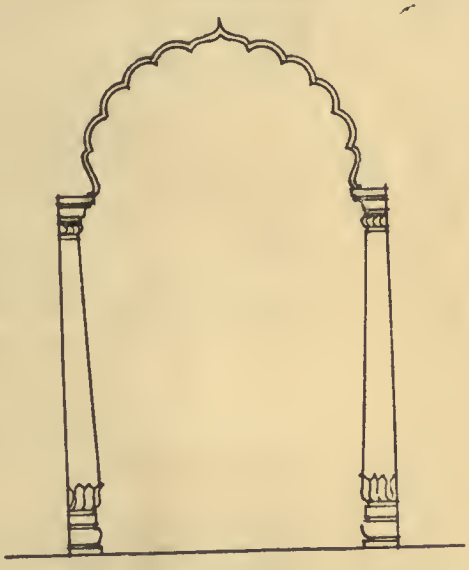
KOKILA



SIMPLE KUTA.



KŪTA.



ELEVATION.

PLAN.

KUMBHA-PAÑJARA.

(5) Śaṁbhoś chāru-śubhair akāri bhavanaṁ pāshāṇa-kūṭair idam ।
'He built this temple of Śambhu with beautiful and brilliant most excellent stones.'—Dr. Bühler. This translation of kuṭa does not seem to suit the context.

(Two Skt. Inscrip. in the British Museum, no. 1, line 12, *Ind. Ant.*, Vol. XIII, p. 251.)

(6) Aneka-ratna-khachita ruchira-maṇi-kalaśa-kaḷita-kūṭa-koṭi-ghaṭitam apy-uttuṅga-chaityālayam—'(having erected) a lofty chaityālaya, with 'kalaśas' or towers surmounted by rounded pinnacles set with all manner of jewels.' (For 'kalaśa,' Mr. Rice has put in 'gopura,' perhaps a slip.)

(*Ep. Carnat.* Vol. VI, Mūdgere Taluq, no. 22 ; Roman text, p. 148, line 12 ; Transl., p. 63, para. 2.)

(7) Śri-vīra-somanātha-devara tri-kūṭa-devālaya—'the three pinnacled temple of the god Vīra-Somanātha'.—(*Ep. Carnat.*, Vol. VII, Channagiri Taluq, no. 32 ; Roman text, p. 322, line 18 ; Transl., p. 183.)

KŪCHAKRA (*see* KRIPA)—Water-wheels for wells (*R.-V.*, X, 102, 11, *cf. Zimone*, All. Lib., 157).

KŪṬA-KOSHṬHA—A compartment on the top of a building, an attic room.

(*Kāmikāgama*, LV, 123–130 ; *see* under KARṆA-KŪṬA.)

KŪṬA-ŚĀLĀ—A small room on the top of a building.

Kūṭa-śālā sabhāṁ kṛitvā bhoga-bhogyaṁ viśeshataḥ ॥
Kūṭa-śālā-yutaṁ vāpi kūṭa-śālāntam eva cha ।
Prākāreṇa samāyuktaṁ gopureṇa vidhīyate ॥

(*Suprabhedāgama*, XXXI, 113, 120.)

KŪṬĀGĀRA (*see* KŪṬA-ŚĀLĀ)—A small room at the top of a building. Window-chambers (W. Griger : *Mahāvaṁśa*, p. 297).

Rāmāyaṇa (I, 5, 15, etc.) :

Kūṭāgāraiś cha saṁpūrṇāṁ indrasyevamarāvatīm ॥

Commentary : Kūṭākhyair āgāraiḥ strīṇāṁ krīdā-gṛihair iti yāvt kūṭāḥ śālāgāraṁ gṛiham anye ।

KŪPA—A well with its mechanism of water-wheels, etc. (*R.-V.*, X, 102, 11 ; VII, 36, 3 ; IX, 97, 4), masonry sides (Parśu, *R.-V.*, I, 105, 8 ; X, 33, 2) and metal fittings or ribbed resembling sickles (*see* KUCHAKRA).

(1) Dewal Praśasti of Lalla the Chhinda (v. 20, *Ep. Ind.* Vol. I, pp. 79, 83).

(2) Śrīdhara's Devapattana Praśasti (v. 10, *Ep. Ind.*, Vol., II, p. 440).

(3) A well with flights of steps :

Śīta-svādu-viśuddha-bhūri-salilaṁ sopāna-mālojjvalam ।
. . . kūpaṁ chainam akārayad ।

(Gangdhar stone Inscrip. of Visvavarman, lines 38, 39, *C. I. I.*, Vol. III, F. G. I., no. 17, p. 76.)

(4) Ānaṁda-putreṇa Saṁgamitreṇa kue (kūpa) kaṭite mata-pitae puyae save-satana hida-suhae—' This well was excavated by Saṁgamitra, the son of Ananda, in honour of his father (and, mother (and) for the well-being and happiness of all beings.

(Paja Inscrip. of the year III, New Kharoshṭhi Inscrip. from the Lahore Museum, no. II, line 2, *Ind. Ant.*, XXXVII, p. 65.)

(5) Khane kūpe Dashaveraṇa—he dug well of Dashaveras.

(Inscrip. of Ara, lines 4-5, *Ind. Ant.*, Vol. XLII, p. 133.)

KṚISHṆA-MAṆḌALA—The iris of the eye of an image.

(*M.*, LXV, 66, LXVI, 65, LXX, 69.)

KEYŪRA—The armlet worn on the upper arm of an image.

(*M.*, L, 14, LIV, 13, etc.)

KERALA-(KĀNTA)—A class of the twelve-storeyed buildings, once prevailing in the ancient country of Kerala.

Tad eva bhūta-bhāgena kshudra-śālā-viśālakam ।
Hārā cha tat-tri-bhāgena cha yuktyā samalaṁkṛitam ।
Śeshaṁ prāg-ukta-vat kuryād eva(ṁ) kerala-kāṁtakam ।

(*M.*, XXX, 28-30 ; *see* under VARĀṬA, *ibid.* 17-27.)

KEŚA-KŪṬAKA—The tip of the hair, the top knot of an image.

(*M.*, L, 301 ; *see* USHṆISHA.)

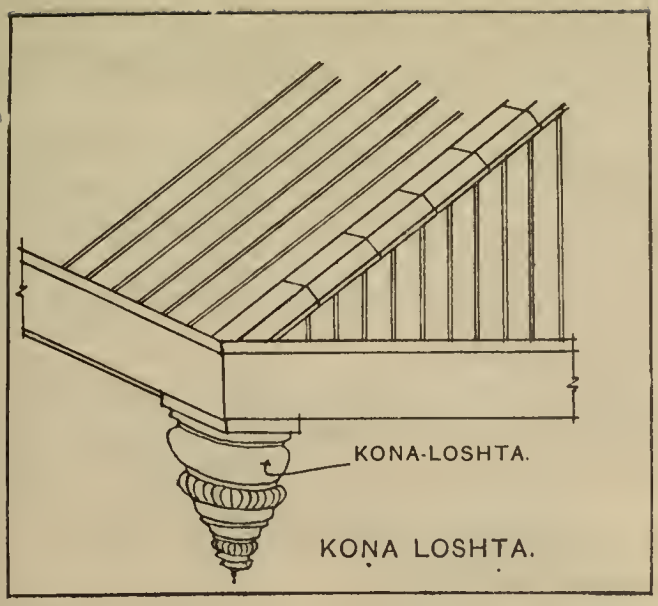
KEŚA-BANDHA—A head-gear for the images of goddesses and queens.

(*M.*, XLIX, 14, 88 ; LIV, 88 ; *see* details under BHŪSHAṆA.)

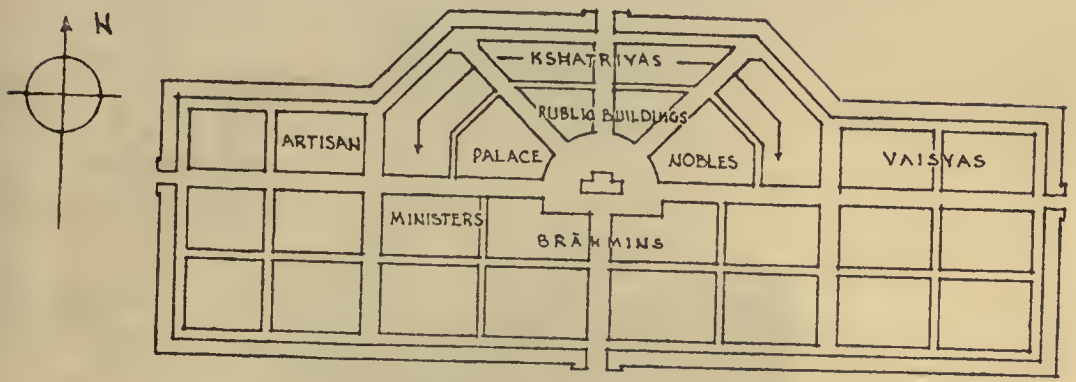
KEŚARA—A lion's or horse's mane, the filament of a lotus, a moulding, a type of building.

A class of the single-storeyed buildings (*M.*, XIX, 173-175 ; *see* under PRĀSĀDA).

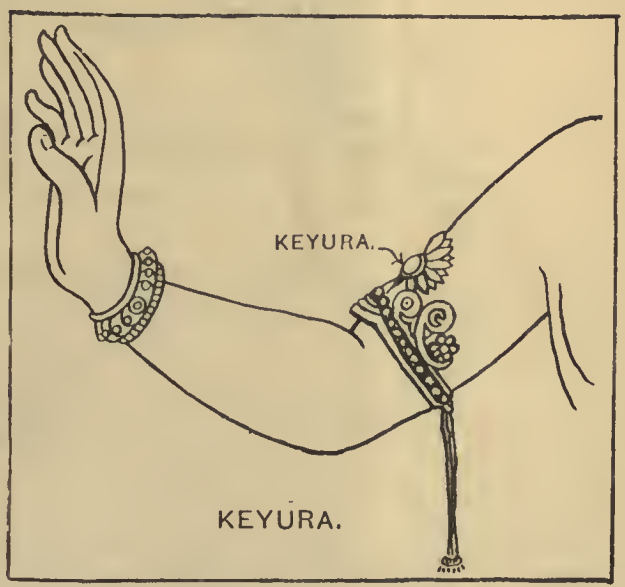
A class of the three-storeyed buildings (*M.*, XXI, 31-39 ; *see* under PRĀSĀDA).



KONA LOSHTA.



GENERAL OUTLINE OF KUBJAKA TOWN



KEYURA.

KOKILĀRGALA

KAILĀŚ(S)A—A type of building which is 28 cubits wide, has eight storeys, and turrets.

(1) *Bṛihat-Saṁhitā* (LVI, 21 ; *J.R.A.S.*, N. S., VI, p. 319 ; *see* under PRĀSĀDA).

(2) A class of the three-storeyed buildings.

(*M.*, XXI, 52 ; *see* under PRĀSĀDA.)

(3) *Matsya-Purāṇa* (Chap. CCLXIX vv., 32, 47, 53 ; *see* under PRĀSĀDA.)

(4) *Bhavishya-Purāṇa* (Chap. CXXX, v, 28 ; *see* under PRĀSĀDA).

(5) A building with four śālās (compartments, halls) and four kūṭas (towers or domes) :

Chatuḥ-śālā-chatusḥ-kūṭa-yuktaḥ kailāśa eva hi ॥

(*Suprabhedāgama*, XXXI, 42.)

A class of buildings, circular in plan and names as follows :

(1) Balaya, (2) Dundubhi, (3) Padma, (4) Mahā-padma, (5) Varddhanī, (6) Ushṇīsha, (7) Śaṅkha, (8) Kalasa and (9) Svavṛīk-sha.

(6) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 21, 23, 24–29 ; *see* under PRĀSĀDA).

(7) *Agni-Purāṇa* (Chap. CIV, vv. 11, 17, 18 ; *see* under PRĀSĀDA).

KOKILA—A moulding of the throne.

(*M.*, XLV, 125, *see* under SIṀHĀSANA.)

KOKILĀRGALA—A latch, bolt or bar attached to the throne.

Aneka-śṛiṅkhalopetaṁ bahu-kuṇḍala-bhūshitam ।
Kavāṭa-yugmaṁ kartavyaṁ kokilārgala-saṁyutam ।

(*Kāmikāgama*, LV, 52.)

KOCHCHHA—A cane-bottomed chair.

(*Mahāvagga*, V, 10, 2.)

KOṬA—A fort, a hut, a shed.

Atyuchair bhitti-bhāgair divi divasa-pati-syandanaṁ vā vigṛihṇan yenākāri koṭaḥ । 'By whom the fort (in this place) was built, which perhaps may arrest the chariot of the sun in the sky by its high walls.'

(An Abu Inscrip. of the reign of Bhimadeva, II, v. 9, *Ind. Ant.*, Vol. XI, pp. 221, 222.)

KOṆA—A class of buildings.

(*Kāmikāgama*, XLV, 55–58 ; *see* under MĀLIKĀ.)

KOṆA-PĀRĀVATA (*see* KAPOTA-PĀLIKĀ)—A dove-cot or dove-ridge.

(*Vāstu-vidyā*, XVI, 27, 36 ; *see* under KAPOTA-PĀLIKĀ.)

KOṆA-LOSHṬA—A moulding, the pendulent-like ornament at the corner of a pent-roof.

(*See* details under LOSHṬA.)

KOLAKA (*see* AṄGULA)—A measurement of two aṅgulas, a fort, a village, a building material.

A kind of village (*M.*, IX, 486 ; *see* under GRĀMA).

A kind of fort (*M.*, X, 41 ; *see* under DURGA and NAGARA).

Some fruit or material employed in the foundation-pit.

(*M.*, XII, 98.)

KOLHI-VEŚMIKĀ—A hall-mansion.

Śrī-kṛishṇagiri-mahārāja-mahā-vihāre upaśama-kolhiveśmikāḥ śachī-varīkāḥ sametā akshainītiḥ drāmmā-śataikena kārāpitaḥ—' have had hall-mansions (suitable) for meditation built at this great monastery of the famous mount of Kṛishṇa and have given as a perpetual endowment one hundred drammas.'

Śrimat-kṛishṇa-giri-mahā-vihāre bhadra-śrī-vishṇu-bhikshūṇāṁ tatra-sthārya-(saṁghasya) drammāṇāṁ śatamekaṁ (datvā) paśamana-saḍiśāṁ chīvarikādi-lābha-samanvitāṁ kolhiveśmikāṁ kshityāṁ nyavīviśat—' gave one hundred drammas to the monks of the worshipful community dwelling at the great monastery of the famous mount of Kṛishṇa, and caused to be built in the ground a hall-mansion suitable for meditation.'—Dr. Hultzsch.

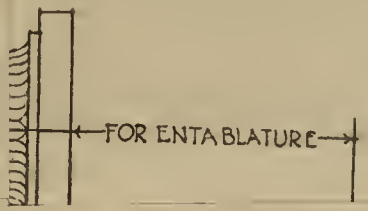
The translations quoted above are, it should be noticed, too free. The term 'kolhi' also does not sound like a Sanskrit word ; but there are words like 'kalhaṇa'; there is a phonetic resemblance between 'kolhi' and 'kulya' which means something belonging to the family and hence 'main' or 'chief.'

(Three Inscrip. from Kaṇheri, no. 15, line 4 f. ; no. 43A, line 2 f., *Ind. Ant.*, Vol. XIII, pp. 134, 135, 136.)

KOŚA—A coffer with a pillow (*A.-V.*, XIV, 1, 6) 'rent along with a bride to her husband's house' which may be used as a couch or bed (*cf.* Germanic marriage coffers).

KOŚA-MAṆḌAPA—A store-room, a treasury.

(*M.*, XXXII, 68 ; *see* under MAṆḌAPA.)


FOR ENTABLATURE

KOSHṬHA—A store-room, a granary, a chamber, a wall; the mezzanine room.

(*M.*, xxxv, 210, etc.)

Eka-nāsikayā yuktaṁ pañjaraṁ samudāhṛitam ।
Kūṭeshu nāsikā-yuktaṁ koshṭam etat prakīrtitam ॥

(*Suprabhedāgama*, xxxi, 80.)

KOSHṬHAKA—A part of the pillar, a granary, a surrounding wall.

Ko hṭhakāstv-iha chatvāraś chatush-koṇeshu chaiva hi ।

(*Suprabhedāgama*, xxi, 50.)

Koshṭhakaṁ tad-dvi-pārśve tu janma-pādākriti(s) tathā ।

(*M.*, xv, 85.)

Āstāṁ tāvat pratolī tad-upavirachitaṁ koshṭhaka-dvaṁ-dvam etat prauchchair ālāna-yugmaṁ vijaya-(vara)-kareḥ(-kariṇaḥ) śatru-lakshmyāś cha sadma—'near the gate-way were constructed two granaries.'

(Hānsi Stone Inscrip. of Prithvīrāja, V. S. 1224, v. 6, *Ind. Ant.*, Vol. xli, pp. 19, 17.)

KOSHṬHAKARA—A type of Nepalese chaityas, erected on a low flat mound one-tenth of its diameter in height.

(*See* Woodcut 156, Fergusson, *History of Indian and Eastern Architecture*, Vol. i, p. 280.)

KOSHṬHA-ŚĀLA—A kind of closed hall.

(*M.*, xxvi, 37 ; *see* under Śālā.)

KOSHṬHA-STAMBHA—A kind of pillar, a pilaster.

(*M.*, xv, 84-87 ; *see* under Stambha.)

KOSHṬHĀGĀRA—A store-house, a class of Buddhist chaityas in Nepal where there is a four-faced liṅga of Śiva with a corresponding emblem.

Śrāvastīyānāṁ mahā-mātrāṇāṁ śāsanaṁ mānavasiti-kaṭāt ।
Śrīmati vaṁsa-grāme evaite dve koshṭhāgāre (duve koṭagalani), trigarbhe . . . । (Translated into Sanskrit by Dr. Büh'er.)

'The order of the great officials of Śrāvasti (issued) from their camp at Mānavasitikaṭa.'

'These two store-houses with three partitions (which are situated even in famous Vaṁśagrāma), require the storage of loads (bhāraka) of black Pancium.'

(Sohgaura copper plate Inscrip. 1-2, *Ind. Ant.*, Vol. xxv, pp. 265, 262 ; *see B. A. Society Proceedings* of 1894, p. 84 f.)

Nārāyaṇa-devara koṭṭāravan ākalpam age yaksheśana bhaṇḍāram enalu mādisidan udāraṁ ballāla-deva dharaṇi-nāthaṁ ।

'Erected a kottāra (koshṭhāgāra) giving it the name of Yaksheśa-bhāndāra (=store-house).'

(*Ep. Carnat.*, Vol. v, Part I, Belur Taluq, no. 20 ; Text, p. 119, line 3 f. ; Transl., p. 52 ; *see* Fergusson, *Ind. and East. Arch.*, II, 279, Woodcut, 156.)

KAUTUKODAYA (*cf.* UTSAVA and *see* UTSEDHA)—A kind of height, *lit.* (?) the height of an image made as a plaything (experiment) rather than for worship.

Utsave(-savasys) chārdha-mānena kautukodyam īritam ।

(*M.*, LXI, 22 ; *see* context under UTSAVA.)

Nābhyantaṁ meḍhra-sīmāntaṁ nava -mānaṁ chotsavodayam ।
Tad-ardhaṁ kautukotsedhaṁ kanyasādi trayaṁ trayam ।

(*M.*, LXIV, 27-28 ; *see* context under UTSAVA.)

KAUŚALYA—A pavilion with fifty-six pillars.

(*Matsya-Purāṇa*, Chap. CCLXX, v, 8; *see* under MAṆḌAPA.)

KAUŚIKA—A type of pavilion.

(*M.*, XXXIV, 249 ; *see* under MAṆḌAPA.)

KRĪḌĀ-KETANA—A pleasure-house.

Tīrthottuṁga-sarasvatī-kṛita-parishvaṁgasya sārasvatam ।
Kā-ketanam etad atra vidadhe vāraṁnidhe rodhasi ॥

'(The poet Nānāka erected here) this Sārasvata pleasure-house on the banks of the sea that has been embraced by the high tīrtha (sacred banks) of the Sarasvati.'

(Sanskrit Grants and Inscrip. Prasasti no. IV, 33, *Ind. Ant.*, Vol. XI, pp. 103, 106.)

KSHAṆIKA-BERA—An idol for temporary use, as is carved generally with mud by the worshipper himself.

(*M.* LXVIII, 26, etc.)

KSHAṆIKĀLAYA—A temple where temporary idols are worshipped.

(*M.*, LXI, 127.)

KSHUDRA-GOPĀNA (*see* GOPĀNA)—The small beam, a moulding of the entablature, the plinth, the base, and the capital, etc.

(*Kāmikāgama*, LIV, 2 ; *see* under PRASTARA.)

KSHUDRA-NĀSĀ(-Ī)—The small nose, a moulding resembling the nose, a vestibule (prati, pratimukha) side pillar, lower pillars.

It terminates by the beam in entablatures; all the kshudra-nāśās correspond to lower pillars; and that corresponding to the karṇapāda (side pillar) is half of the forepart of the column (or entablature).—(*M.*, XVI, 92–95; XLVI, 24, etc.)

Tilaka-kshudra-nāsī-yukta-toranaiś cha samanvitam (vimānam) ।

(*Kāmikāgama*, L, 93.)

See Amarakosha (II, ii, 15) under GOPĀNA.

KSHUDRA-ŚĀLĀ—A small hall, room or house.

Khsudra-śālā-pradeśe tu sarvālaṅkāra-saṁyutam ।

(*M.*, XXVI, 71, etc; *see* ŚĀLĀ.)

KSHUDRĀBJA—A small lotus, a moulding of the pedestal, a small cyma.

(*M.*, XIII, 61, etc.; *see* the lists of mouldings under UPAPĪṬHA.)

KSHEPAṆA—*Lit.* projection. A drip-moulding; the door-frame, a moulding above the plinth in pedestal, generally placed between a dado and cyma, a fillet and cyma, or a petal and fillet. Etymologically it would indicate a moulding like a spout to throw off water, and in this office it would resemble the corona (kapota), i.e. the square projection having a broad vertical face and the soffit or underportion recessed so as to form a drip which prevents water from running down the building. In bases it would resemble a cornice (*cf. M.*, XIV, 370) which is used as the term for any crowning projection. In this sense it is also found in the western architecture (*cf.* Fletcher, *Hist. of Arch.*, figs. 191, 192, 197, 198). In Indian architecture it also implies a door-frame (*M.*, XXXIX, 105–110).

A moulding of the pedestal (*M.*, XIII, 45, etc.; *see* the lists of mouldings under UPAPĪṬHA).

A moulding of the base (*M.*, XIV, 120, etc.; *see* the lists of mouldings under ADHISHṬHĀNA).

In connexion with the door:

Madhye tu kshepaṇaṁ vāme śuddha-dvārāvasānakam ।

(*M.*, XXXIX, 105.)

In connexion with the bedstead:

Ekaṁ vātha dvayaṁ vāpi kshepaṇaṁ bahudhānvitam ।

(*M.*, XLIV, 20.)

A moulding of the pīṭha or pedestal of the phallus :

Utsedhe shoḍaśāṁśe tu prathamochchaṁ dvi-bhāgikam ।
Padmochchaṁ tu tri-bhāgaṁ syāt tat-urdhve kshepaṇāṁśakam ।

(*M.*, LIII, 30, 31.)

KSHEMA—A class of buildings.

(*Kāmikāgama*, XXXV, 32-34 ; *see* under MĀLIKĀ.)

KSHOṆĪ—A kind of pent-roof, stated to be employed in residential buildings.

(*M.*, XVIII, 177-178.)

KH

KHAṬṬAKA(-ṬṬĀ)—A bedstead, a seat, a pedestal or throne.

Mūrttīnām iha pṛishṭhataḥ kari-vadhū-pṛishṭha-pratishṭhā-jushāṁ
tau-mūrttir vāme āśma-khaṭṭaka-gatāḥ kāṁtā-sametā daśa ।

'Behind the statues placed on the backs of female elephants, . . . (he) caused to be made here ten images of those persons mentioned above) together with their wives on khaṭṭaka of spotless stones.'

'The word, khattaka, judging from the context, seems to have the meaning of pedestal or throne.' Dr. Luders.

(Mount Abu Inscrip. no. I, v. 64, *Ep. Ind.*, Vol. VIII, pp. 212, 218, 200.)

KHAṬVĀ—A long couch, a bedstead.

KHAḌGA—A type of octangular building.

(*Garuḍa-Purāṇa*, Chap. XLVII, vv. 21, 23, 31-32 ; *see* under PRĀSĀDA.)

KHAṆḌA-HARMYA—A sectional tower, a tower with open verandahs or balconies.

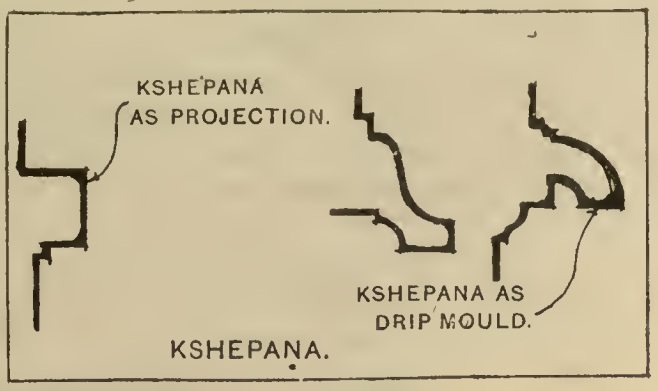
Adho-bhāga-dvayenātha kūṭam ekena vā bhavet ।
Talam ekaṁ bhaved grāsaṁ (?) khaṇḍa-harmyaṁ tri-bhūmike ॥
Āndhārāndhāri-hārokta-khaṇḍa-harmya-viśeshitam (vimānam) ॥

(*Kāmikāgama*, L, 80, 91.)

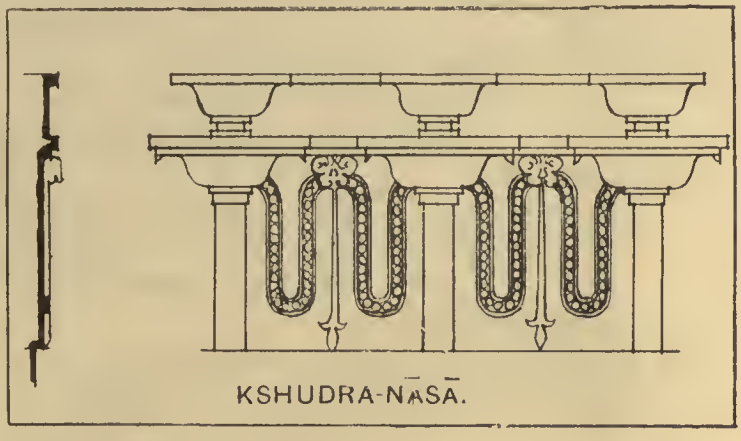
KHAṆḌOTTARA—A kind of entablature (prastara).

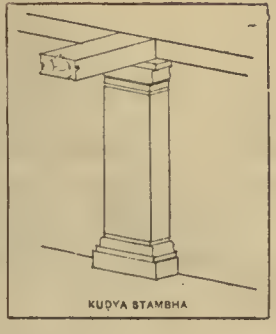
Pāda-vistāra-vistaraṁ samodaya-samanvitam ।
Khaṇḍottaram iti jñeyaṁ pādenotsedhaṁ saṁyutam ॥

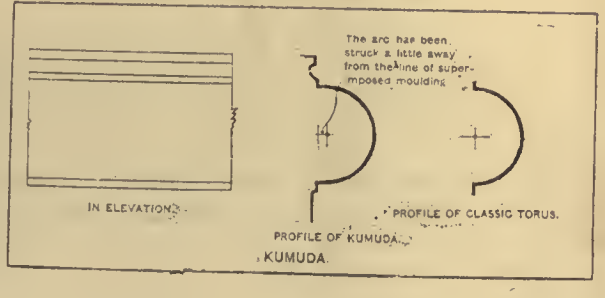
(*Ibid.*, LIV, 5.)



KSHEPANA.


KSHUDRA-NĀSĀ.


KUḌYA STAMBHA



KUMUDA.

KHARVAṬA—A village, a fort, a fortified city.

(1) A village (*M.*, IX, 456), a fortified town (*M.*, X., 36).

In connexion with the foundations :

Gramādīnāṁ nagarādīnāṁ pura-pattana-kharvaṭe ।
Koshṭha-kolādi-sarvēshāṁ garbha-sthānam ihochyate ।

(*M.*, XII, 168-169.)

A kind of pavilion used as the dining hall of the king :

Nṛipāṇāṁ bhojanārthaṁ syāt kharvaṭākhyaṁ tu maṇḍapam ।

(*M.*, XXXIV, 455 ; *see also* 456-472, 567.)

(2) A fortress to defend a group of two hundred villages :

Dvi-śata-grāmyā khārvaṭikam ।

(*Kauṭilīya-Artha-śāstra*, Chap. XII, p. 46.)

(3) Kshullaka-prākāra-veshṭitaṁ kharvaṭam ।

(*Rāyapaseṇī-sūtra-vyākhyāne*, *ibid.*, p. 206.)

(4) Karvaṭāni kunnagarāṇi ।

(*Praśna-vyākaraṇa-sūtra-vyākhyāne*, *ibid.*, p. 306.)

(5) Dhanuḥ-śataṁ pariṇāho grāma-kshetrāntaraṁ bhavet ।
Dve śate kharvaṭasya syān nagarasya chatuḥ-śatam ।

(*Yājñavalka*, II, 167.)

(6) Vaṇijām api bhogyaṁ tu tad-vad e.a (like nagara) samīritam ।
Yat sthānaṁ brāhmaṇānāṁ tu kharvaṭaṁ puravāsinām ।
Nagaryāvartanaṁ yat kharvaṭaṁ tad udāhṛitam ।

(*Kāmikāgama*, XX, 7, 9.)

(7) Iya-khavadamhi—' (By means of his vase Vagra Maréga's son Kamagulya, who has fixed his residence) in this place Khavaṭa . . . Mr. Pargiter.

So far the editor is right. But in his long note on this expression he has rather too elaborately dwelt on a number of conjectures without however having been able to arrive at any conclusion whatever. This Prākrit expression can easily be rendered into Sanskrit by *atra kharvaṭe* (in this city or town).

(The Inscrip. on the Wardak vase, line 1, *Ep. Ind.*, Vol. XI, pp. 210, 211, 212, last para.)

(8) ' An ornament to the Kuntala-deśa was the Vanavase twelve thousand Kingdom, the chief capital (pradhāna-rājadhāni) was Chandragupt. with another name of Gomanta-parvata, in the twelve *kharvaṭa* country (attached to which), in Nāgarakhaṇḍa of Yaḍa-nāda Kāntapuri, otherwise named Vīra-Mārapapuri, belonging to Kamaṭṭampuri, situated on the bank of the Varadā-river, the king, in order that his government might

continue as long as sun and moon, as an offering to Kṛishṇa (with all the usual rights), gave, free of all imposts.'—(*Ep. Carnat.*, Vol. VIII, Part I, Sorab Taluq, no. 375, Transl., pp. 66, last para.)

(9) Grāma-nagara-kheḍa-karvvaḍa-maḍaṁba-droṇamukha-pattanaṇigalinidam aneka-māṭa-kūṭa-prāsāda-devāyatananigalidam oppuva-agrahārapaṭṭaṇaṁgalimdam atisāyav-appa . . . I

'At Teridāl a merchant town situated in the centre and the first in importance among the twelve (towns) in the glorious Kundi three thousand, adorned with villages, towns, hamlets, villages sorrounded by hills, groups of villages, sea-girt towns, and chief cities, with elegant mansions, palaces and temples, and with shining agrahāra-towns in the country of Kuntala.'

(Old Kanarese Inscrip. at Terdal, line 58, *Ind. Ant.*, Vol. XIV, pp. 19, 25.)

(10) 'With myriads of people, practices of virtue, agreeable occupations, stream of the (nine) sentiments, pleasure-gardens, separated lovers, splendid tanks, full lotus-beds, gilded boats for spring festivals, ghaṭikā-sthānas (religious centres), the supports of dharmma and mines of enjoyment, moats which were as if the sea being overcome had returned here on account of the collection of gems, groups of the lotus faces of beautiful women fair as the moon (grāma-nagara-kheḍa-kharvvaṇa-maḍamba-droṇamukha-purapattaṇa-rājadhānī), on whatever side one looked, in these nine forms did the Kuntala-deśa shine.'—(*Ep. Carnat.*, Vol. VIII, Shikārpur Taluq, no. 197 ; Transl., p. 124, para. 1, last seven lines ; Roman text, p. 214, line 27, f.)

KHALŪRAKA(-RIKĀ)—Waffenübungen bestimter Platz (*Pet. Dict.*), a parade, a place for military exercise (M. Williams, *Dict.*), a parlour, a reception-hall or a drawing-room round a house ; an enclosure-building round a house, village, city or fort.

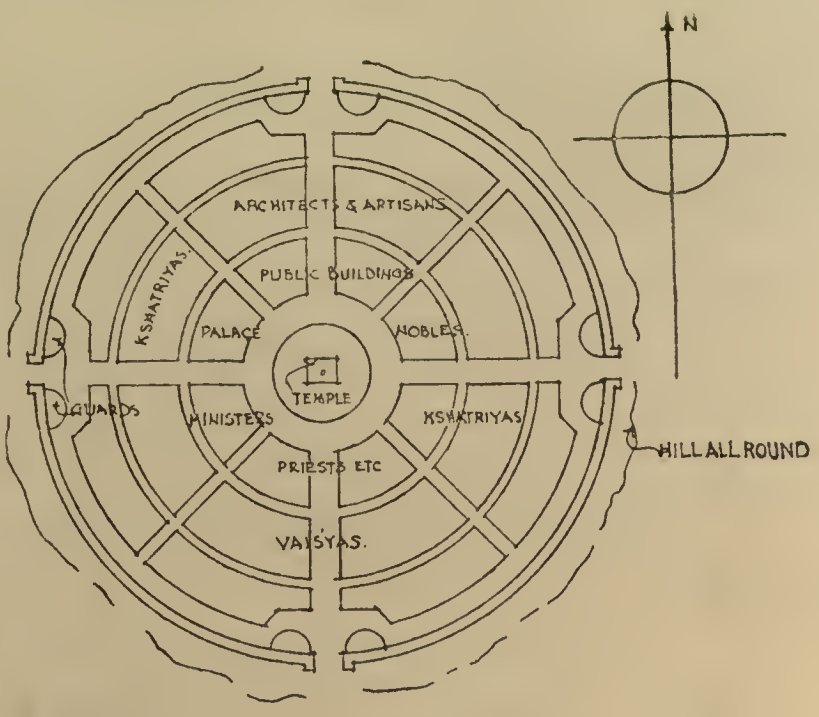
(*Kāmikāgama*, LV, 20 ; *see* below.)

(1) Etad droṇaṁ cha bhūpānām āyudhābhyāsa-maṇḍapam I
Sarvaṁ daśāṁśakaṁ dīrghaṁ netra-tri-bhāga-maṇḍapam I
Tat-pure'lindam ekāṁśaṁ navāṁśena yutāṅkaṇam I
Tat-pārśve puratas chaiva te yugmāṁśe khalūrikāḥ I
Droṇākhya-maṇḍapaṁ chaivam esha yuddhārtha-yogyakam I

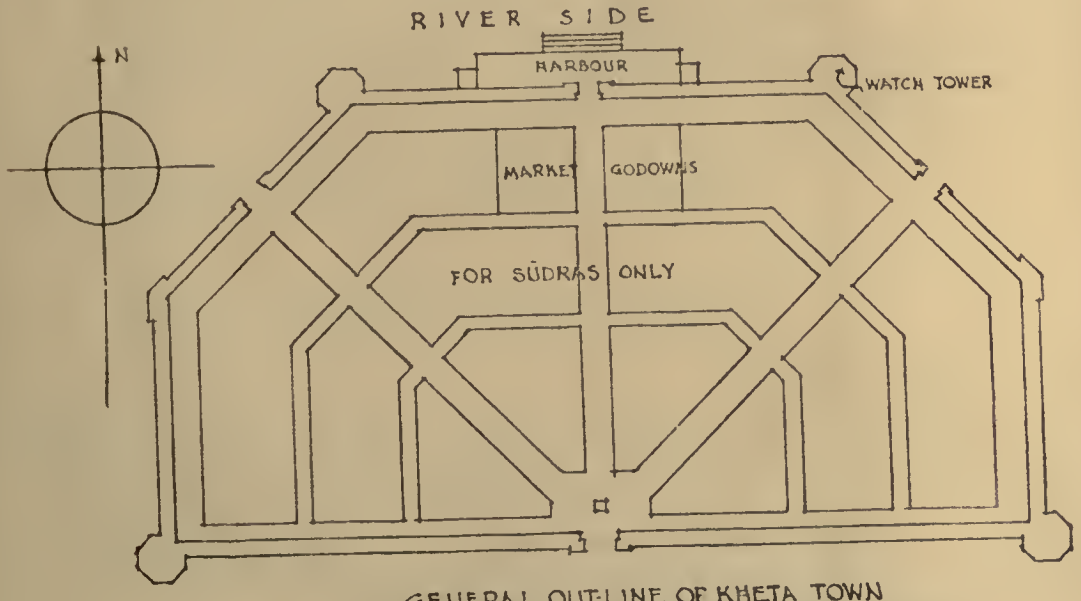
(*M.*, XXXIV, 434-439.)

Ashṭāshṭāṁśa-vistāram āyāmaṁ tatra kalpayet I
Tan-madhye dvi-dvi-bhāgena kalpayet vivṛitāṅkaṇam I
Tad-bahiś chāvṛittāṁśena kuryāch chaikā khalūrikā II

(*Ibid.*, 440-442.)



GENERAL OUTLINE OF KHARVATA TOWN



GENERAL OUT-LINE OF KHETA TOWN
THERE SHOULD BE NO RESIDENCE OF KINGS OR UPPER CASTE PEOPLE IN THIS VILLAGE

See also lines 433–453, and then compare :

Nṛipāṇāṁ bhojanārthaṁ syāt kharvaṭākhyaṁ tu maṇḍapam ।

(*M.*, XXXIV, 455.)

Then ' khalūrika ' is stated (lines 446, 450) to be built round a dining-hall and hence not for any military purpose ; it appears like a parlour.

Compare also :

Tan-madhye pañcha-bhāgena sapta-bhāgāṅkaṇaṁ tathā ।
Tad-bāhye paritāṁśena kuryād antar alindakam ।
Kalūrikāpi tad-bāhye tri-tri-bhāgena maṇḍapam ।

(*Ibid.*, 284–286.)

Evaṁ vasanta-yogyaṁ syāt devānāṁ kshatriyādīnām ।

(*Ibid.*, 296.)

Tad-vibhāga-dvi-bhāgena vistāraṁ maṇḍapam bhavet ।
Dvi-tri-bhāgāṅkaṇaṁ pūrve eka bhāgaṁ khalūrakam ।

(*Ibid.*, 351–352.)

(2) Evaṁbhūtasya vāsasya samantāt syāt khalūrikā ।
Vāsa-vyāsaṁ chatur-bhāgaṁ kṛitvā chaikādi-bhāgataḥ ॥
Vṛiddhyaṁ vāsasya bāhye tu shoḍaśāvadhi-bhāgakān ।
Vyapohya parītaḥ kuryāt prathamāvaraṇāditaḥ ॥
Kalūrikāṁ(s) tu chaikādi-sapta-bhāgāvasānakāḥ ।
Mukhe cha pārśvayoḥ pṛishṭhe pattayaḥ syur yatheshṭataḥ ॥
Oja-yugma-pramāṇena nyūnā vāpy-adhikā tu vā ।
Sabhadrā vā vibhadrā vā khalūrī syād yatheshṭataḥ ॥
Etāsām antarālaṁ tu samaṁ vā vishamaṁ tu vā ।
Kalūri-dhāma-madhyaṁ tu tad-vad eva vidhīyate ॥

(*Kāmikāgama*, XXXV, 103–107 ; *see also* 108–116.)

Etāṁ hkalūrikāṁ kuryāt prāsādādishu buddimān ॥
Devānāṁ manujānāṁ cha viśeshād rāja-dhāmani ॥
Gopuraṁ cha khalūrī cha mūla-vāstu nirīkshitam ॥

(*Ibid.*, 107*a*, 118, 128.)

Samāvṛitā khalūrikā tāny-evoktāni paṇḍitāḥ ।
Nagara-grāma-durgāṇāṁ śeshāny-uktāni veśmanām ॥

(*Ibid.*, LV, 20.)

KHEṬAKA—A village (*M.*, IX, 456), a fortified town (*M.*, X, 36, 39).

(1) Tatas tan-nirmayāmāsuḥ kheṭāni cha purāṇi cha ॥
Grāmāṁś chaiva yathābhāgaṁ tathaiva nagarāṇi cha ॥
Kheṭānāṁ cha purāṇāṁ cha grāmāṇāṁ chaiva sarvaśaḥ ।
Tri-vidhānāṁ cha durgāṇāṁ parvatodaka-dhanvinām ॥

Nagarād ardha-vīshkambaḥ kheṭaṁ paraṁ tad-ūrddvataḥ ।
Nagarād yojanaṁ kheṭaṁ kheṭād grāmo'rdha-yojanam ॥

(*Brahmāṇḍa-Purāṇa*, Part I, 2nd Anushaṁga-pāda, Chap. VII, vv. 93, 94, 105, 111.)

(2) Pāṁsu-prakāra-nibaddha-kheṭam ।

(*Rāyapaseṇi--sūtra-vyākhyāne*, p. 206.)

(3) Kheṭāni dhūlī-prākāropetāni ।

(*Praśna-vyākaraṇa-sūtra-vyākhyāne*, p. 306.)
(*See Kauṭilīya-Artha-śāstra*, Chap. XXII, p. 46, footnote.)

(4) Vane jana-pade chaiva kevale śūdra-scvitaḥ ।
Kaṇṭakaḥ kheṭako grāmaḥ kramāt tri-vidham īritaḥ ।

(*Kāmikāgama*, XX, 10.)

(5) Nagarāṇi kheṭān jana-padāṁs tathā ।

(*Mahābhārata*, III, 13, 220, etc.)

(6) Pura-grāmākāra-kheṭa-vāṭa-śibira-vraja-ghosha . . .

(*Bhāgavata-Purāṇa*, 5, 30.)

(7) One of the 750 villages 'which arc designated by (their chief town) Śrī-Harsapura.'—Rāshtrākuta Grant of Kṛishṇa II, *Ep. Ind.*, Vol. I, pp. 55, 57, line 33, p. 53, footnote 3.)

(8) 'The modern kheḍā (khaira).'—(*Ind. Ant.*, Vol. X, p. 378 ; Vol. XIV, p. 198.)

(9) Lāṭa-deśāntar vvarttī kheṭaka-maṇḍalāntarggataḥ Kevañcha-nāmā grāmaḥ ।—(Cambay Plates of Govinda IV, line 52, *Ep. Ind.*, Vol. VII, pp. 40, 45.)

(10) Śrī-kheṭakāhāre-uppalaheṭā-pathake mahilābali-nāma-grāmaḥ ।

'The village, named Mohibābali, in the Uppalaheṭāpathaka in the famous Kheṭaka (? city) āhāra.'—(*Ind. Ant.*, Vol. VII, p. 72, Plate II, lines 5-6.)

(11) Kheṭakāhāraṁ vishaye baṇḍarijidri-pathakāntarggata-aśilā-pallika grāmaḥ ।

'Kheṭaka is of course the modern Khedā or Kaira itself (lat. 22° 44′ N. ; long. 72° 45′ E.).'

(Alina Copper Plate Inscrip. of Siladitya VII, lines 66-67, *C. I. I.*, Vol. III, F. G. I., no. 39, pp. 179, 189, 173, and notes 2, 3.)

(12) Grāma-nagara-kheḍa-karvvaḍa - maḍaṁba - droṇamukha - patta ṇanigalimdam aneka-māṭa-kūṭa-prāsāda-devāyatanam galidam oppuva-agrahāra-paṭṭanaṁgalimdam atisāyavappa ।

'At Teridala, a merchant-town situated in the centre and the first in importance among the twelve (towns) in the glorious, Kundī.

Three thousand, adorned with villages, towns, hamlets, villages, surrounded by hills, groups of villages, sea-grit towns, and chief cities, with elegant mansions, palaces, and with shining temples, and agrahāra-towns in the country of Kuntala.'

(Old Kanarese Inscrip. at Terdal, line 58, *Ind. Ant.*, Vol. XIV, pp. 19, 25.)

(13) ' With myriads of people, practices of virtue, agreeable occupations, streams of the nine sentiments, pleasure-gardens, separated lovers, splendid tanks, full lotus beds, gilded boats for spring festivals, ghaṭikā-sthānas (religious centres), the supports of dharmma and mines of enjoyment, moats which were as if the sea being overcome had returned here on account of the collection of gems, groups of the lotus faces of beautiful women fair as the moon (grāma-nagara - kheḍa - kharvvaṇa - maḍaṁba - droṇamukha - pura-pattana-rāja dhānīm) on whatever side one looked, in these nine forms did the Kuntala-deśa shine.' (It should be noticed that the passage within brackets is almost identical with the corresponding passage in quotation no. 12 above.)

(*Ep. Carnat.*, Vol. II, Shikarpur Taluq, no. 197, Transl., p. 134 ; para. 1, last seven lines ; Roman text, p. 214, line 27 f.)

G

GAGANA—A kind of pent-roof.

(*M.*, XVIII, 174–180 ; *see* under LUPĀ.)

GAJA (*cf.* HASTI-PṚISHṬHA)—A moulding, a type of building (*see* under KUÑJARA), a kind of oval buildings.

(1) *Agni-Purāṇa* (Chap. CIV, vv. 19–20 ; *see* under PRĀSĀDA).

(2) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 29–30 ; *see* under PRĀSĀDA).

(3) *See* the plan and sections of a Gaja-pṛishṭhākriti building.—(*Ind. Ant.*, Vol. XII, between pages 104–5.)

GAṆYA-MĀNA—The comparative height of the component members of an architectural structure. In the sculptural measurement, the similar height is generally called ' tāla-māna. '

Implying the comparative height of the component members of the buildings of one to twelve storeys :

Janmādi-stūpi-paryantaṁ gaṇya-mānam ihochyate ।
Harmye chāshṭa-tale tuṅge sāshṭa-bhāgādhikaṁ tathā ।

Sārdha-dvyaṁśam adhishṭhānaṁ tad-dvayaṁ pāda-tuṅgakam ।
Tad-ardhaṁ prastarotsedhaṁ sesham ashṭa-taloktavat ।
Evaṁ nava-talotsedhaṁ sarvālaṅkāra-saṁyutam ।

(*M.*, XXVII, 35-39.)

Evaṁ vistāra-gaṇyaṁ syāt tuṅga-gaṇyam ihochyate ।
Janmādi-stūpi-paryantam uktavat saṁgrahaṁ viduḥ ।

(*M.*, XXIX, 36-37 ; *see also* 38-49 under EKĀ-DAŚA-TALA.)

See the details of the other storeys under EKA-TALA, DVI-TALA, TRI-TALA, CHATUS-TALA, PAÑCHA-TALA, SHAṬ-TALA, SAPTA-TALA, ASHṬA TALA, DAŚA-TALA, EKĀ-DAŚA-TALA and DVĀ-DAŚA-TALA.

The similar comparative measurement referring to the sixteen storeys of the gopuras (gate-houses) :

Tuṅge cha trayo-viṁśad bhāgam evaṁ vibhājite ।
Ekā-daśopapīṭhaṁ cha chatur-bhāga(ṁ) masūrakam ।
Vasu-bhāgāṅghri-tuṅgaṁ syāt shad-bhāgaṁ tu vibhājite ।
Tri-bhāgaṁ chopapīṭhaṁ tu śiva-bhāga(ṁ) masūrakam ।
Dvi-bhāgaṁ pāda-tuṅgaṁ syāt tad-ūrdhve prastarād(h)ikam ।
Śikhāṁśaṁ chordhva-māne tu talānām adhunochyate ।
Adhishṭhāna-samaṁ mañcha(ṁ) tat-samaṁ gala-tuṅgakam ।
Galochcha-dvi-guṇaṁ proktaṁ śikharasyodayaṁ nyaset ।
Śikharordhva(ṁ) śikhottuṅgaṁ stūpī(pi)-traya-sam(m)eva cha ।
Evam eka-talaṁ proktaṁ dvi-talādi-tala(m) eva cha ।
Kshudra-madhyaṁ cha mukhyānāṁ gopure tu viśeshataḥ ।
Prastarādi (? upānādi)-śikhāntaṁ syāt gaṇya-mānaṁ pravakshyate ।

(*M.*, XXXIII, 133-144.)

Pūrvavat prastarādy-antaṁ chordhve stupikāntakam ।
Gaṇya-mānaṁ cha sarveshāṁ bhāga-māna(ṁ)-vaśochyate ।

(*Ibid.*, 215-216.)

Bhāga-māna-vaśād gaṇya-mānaṁ yat prochyate budhaiḥ ।

(*Ibid.*, 247.)

The similar comparative measurement referring to the componet parts of throne :

Sarveshāṁ mānam ity-uktaṁ gaṇya-mānam ihochyate ।
Āsanasyodayārdhaṁ vā tri-bhāgaikonam eva vā ।
Upapīṭhodayaṁ hy-eva(ṁ) chokta-tuṅge'dhikaṁ tu vā ।
Śeshaṁ masūrakaṁ vāpi samādhishṭhāna-tuṅgakam ।
Utsedha-ravi-bhāge tu janma-tuṅgaṁ śivāṁśakam ।
Tad-ūrdhve chārdha-kampaṁ syāt pāda-bhāgena yojayet ।

(*M.*, XLV, 85, 96-100.)

GAṆITA—A site plan of 369 square plots.

(*M.* VII, 25–26 ; *see* PADA-VINYĀSA.)

The similar measurement referring to the component mouldings of the Pīṭha (yoni or the pedestal of the phallus) :

Pīṭha-tuṅgam iti proktaṁ gaṇya-mānam ihochyate ।
Utsedhe shodaśāṁśe tu prathamochchaṁ dvi-bhāgikam ।
Padmochchaṁ tu tri-bhāgaṁ syāt tad-ūrdhve kshepaṇāṁśakam ।
Kandharaṁ cha tri-bhāgaṁ syāt tad-ūrdhve kampam aṁśakam ।
Ūrdhva-padmaṁ tr(i)yaṁśaṁ syād vājanaṁ cha tri-bhāgikam ।
Ekāṁśaṁ ghṛita-vāri syād bhadra-pīṭham iti smṛitam ।

(*M.*, LIII, 29–34.)

The similar measurement referring to the component mouldings of the upa-pīṭha or pedestal of the column :

Etat tu nirgamaṁ proktaṁ gaṇya-mānam ihochyate ।
Utsedhe tu chatur-viṁśat pañchāṁśopānam īritam ।
Ekena kampam ity-uktaṁ grīvochchaṁ dvā-daśāṁśakam ।
Kampam ekaṁ tu vedāṁśaṁ vājanaṁ kampam aṁśakam ।
Vesi-bhadram iti proktam athavā dvā-daśāṁśakam ।

(*M.*, XIII, 35–39.)

GAṆḌA-BHERAṆḌA-(STAMBHA)—A kind of pillar.

(*See* under STAMBHA.)

GADĀ—A type of octangular buildings.

(1) *Agni-Purāṇa* (Chap. CIV, VV. 20–21 ; *see* under PRĀSĀDA.)

(2) *Garuḍa-Purāṇa* (Chap. XLVII, VV. 21, 23, 31–32 ; *see* under PRĀSĀDA.)

GANDHA-KUṬI(-Ī)—The Buddhist temple, any chamber used by Buddha. Originally Buddha's abode in the Jetavana monastery at Srāvasti, later, all chapels and temples wherein the Buddha images were installed.

(1) Puṇyoddeśa-vaśāch chakāra ruchiraṁ śauddhodaneḥ śraddhayā
śrimad-gandha-kuṭīm imam iva kuṭīṁ mokshasya saukhyasya cha ।

' —has constructed this gandha-kuṭī of Buddha, graceful and like a hall of emancipation and bliss for the spiritual benefit of '—

' Gandha-kuṭī ' is literally a ' chamber of perfume,' an epithet applied to Buddha temples. The large temple at Buddha Gayā is called, in the inscriptions, ' Mahā-gandha-kuṭī-prāsāda ' (*Ind. Ant.*, Vol. IX, pp. 142–143) and the room in which Buddha lived in Jetavana at Śrāvasti was also known

by this name (Cunningham's *Bharhut Stūpa*, Plate xxxviii, and page 133, no. 22).

(An Inscrip. at Gaya, v. 9, *Ind. Ant.*, Vol. x, pp. 342, 343, note 8.)

(2) Kṛitavantau cha n vinām ashṭa-mahā-sthāna-śaila-gandha-kuṭīm—'they constructed this new gandha-kuṭī (made) of stones (coming from) eight holy places.'

Gandhakuṭī—'perfumed chamber, any private chamber dovoted to Buddha's use.' Childers (s. v.).

The gandha-kuṭī at Jetavana near Śrāvasti is represented on a Bharhut bas-relief.

See also Cunningham's *Bharhut Stūpa* (Plate lvii).

See Sarnath inscription of Mahipalala (line 2, *Ind. Ant.*, Vol. xiv, p. 140, note 7).

(3) 'Gaṁdha-kuṭī'—'the hall of perfumes,' i.e., 'the Buddhist temple.' (Bharaut Inscrip. no. 40, *Ind. Ant.*, Vol. xxi, p. 230, note 34 refers to *Arch. Surv. of W. India*, Vol. v, p. 77 and to *Ind. Ant.*, Vol. xiv, p. 140, already quoted above.)

(4) 'On the other side of his (Buddha's) body, towards the west, he caused to be built a beautiful gandha-kuṭī, pleasing to the eye.'—(Ajanta Inscrip. no. 4, line 27, *Arch. Surv.*, New Imp. Series, Vol. iv, pp. 130, 132.)

GANDHA-MĀDANA—A class of pavilions.

(*M.*, xxxiv, 154 ; *see* under Maṇḍapa.)

GANDHARVA—A class of demi-gods inhabiting Indra's heaven, and serving as celestial musicians. *See* the description of their images.

(*M.*, lviii, 8, 16–19.)

GABHĀRĀ (GARBHĀGĀRA)—An underground shrine, the sanctuary of a temple, the room where the deity is placed, a private room, the female apartments, a lying-in chamber.

'Through the door at the east end of the hall, we descent by some nine steps into the gabhārā or shrine, which is also square, measuring 13 feet 9 inches each way.'—(The temple of Amarnāth, *Ind. Ant.*, Vol. iii, p. 318, c. 1, last para.)

GARUḌA—The king of birds, the sun-eagle ; 'winged beings, resembling the griffin, mythical creatures (suparṇa), foes of nāgas' (Gründel : *Buddhist Kunst in India*, p. 47) ; a type of building

which is shaped like the sun-eagle (garuḍa), has wings and tail, and seven storeys, twenty cupolas (aṇḍa) and 24 cubits wide.

Nandī tadākṛitir jñeyaḥ pakshādi-rahitaḥ punaḥ ||
Garuḍākṛitiś cha garuḍaḥ |

Commentary quotes clearer description from Kāśyapa :

Garuḍo garuḍākāraḥ paksha-puchchha-vibhūshitaḥ |

Cf. Karāṇāṁ shaṭ-chatushkāṁś cha vistīrṇau sapta-bhūmikau |
Daśabhir dviguṇair aṇḍair bhūshitau kārayet tu tau ||

(1) *Bṛihat-Saṁhitā* (LVI, 24. *J.R.A.S.*, N. S., Vol. VI, p. 319).

(2) *Matsya-Purāṇa* (Chap. CCLXIX, vv. 41–43, 51 ; *see* under PRĀSĀDA).

(3) *Bhavishya-Purāṇa* (Chap. CXXX, v. 31 ; *see* under PRĀSĀDA).

A type of oval building :

(4) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 29–30 ; *see* under PRĀSĀDA).

In connexion with the temples of the attendant deities :

(5) Yan-mūla-harmye vṛishabhādi-vishṇur-ādi
Maṇḍapādi-garuḍādi cha gopurādīn |
Tan-mūla-harmya-paritaḥ sthita paśyate'smin (?)
Kuryāt tu sarva-parivāram idaṁ praśastam |—(*M.*, XXXII, 168–171.)

The description of the image of Garuḍa—(*M.*, LXI, 1–148).
Compare also *M.*, XIX, 224.

GARUḌA-SK(-T)AMBHA (*see* under STAMBHA)—Pillars generally bearing the statues of the garuḍa-bird and belonging to the Vaishṇavas.

'Had the temple built, and setting up this śāśana erected a garuḍa-stambha in front.'—(*Ep. Carnat.*, Vol. XII, Pavugada Taluq, no. 78 ; Transl. p. 130.)

GARUTMAN (*see* GARUḌA)—A type of oval buildings.

(*Agni-Purāṇa*, Chap, CIV, vv. 19–20 ;
see under PRĀSĀDA.)

GARBHA—The womb, the foundation, the adytum, the chamber in a temple where the deity is placed, halls of various shapes and sizes used for various purposes. Compare NALIKĀ-GARBHA (rectangular halls), ŚIBIKĀ-GARBHA (square halls), and HARMYA-GARHBA (top rooms, etc.).

(1) Vistārārdhaṁ bhaved garbho bhitty-anyah samantataḥ |
Garbha-pādena vistīrṇaṁ dvāraṁ dvi-guṇam uchchhritam ||

'The adytum measures half the extent (of the whole) and has its separate walls all around. Its door is one-fourth of the adytum in breadth and twice as high.'

(*Bṛihat-Saṁhitā*, LXI, 12, *J.R.A.S.*, N. S., Vol. VI, p. 318.)

(2) Rājā prāsāda-garbhaṁ gatvā ।

(*Hitopadeśa*, ed. Botlingk, p. 157, etc.)

(3) The foundations of the village (*M.*, IX, 7).

The adytum :

Garbhe nanda-vibhāge tu ekaikaṁ liṅga-tuṅgakam ।
Garbha-tāra-samaṁ śreshṭhaṁ tri-vidhaṁ liṅga-tuṅgakam ।

(*M.*, LII, 16, 21.)

(4) Śrāvastīyānāṁ mahā-mātrānāṁ śāsanaṁ mānavasiti-kaṭāt ।
Śrīmati vaṁśagrāma evaite dve koshṭhāgāre tri-garbhe . . . ।

'The order of the great officials of Śrāvasti (issued from their camp at) Mānavasitikaṭa ; these two store-houses with three partitions (which are situated) even in famous Vaṁsagrāma require the storage of black loads of panicum.'

(Sohgaura Copper Plate, lines 1-2, *Ind. Ant.*, Vol. XXV, p. 265.)

GARBHA-GE(-ṚI)HA—The central hall, the adytum, the sanctuary in the middle of which is placed the statue of the deity ; this is sometimes called mūla-sthāna (*see* GARBHĀGĀRA).

(1) Harmya-tāre tu bhūtāṁśaṁ tr(i)yaṁśaṁ garbha-gehakam ।

(*M.*, XIX, 114 ; *see also* 119.)

Garbha-geha, madhya-koshṭha, and nāli-geha are used in the same sense (central hall, *cf. M.*, XXXIII, 301, 305, 309, 313 and 318).

Dvi-tale tāra-saptāṁśaṁ vedāṁśaṁ garbha-gehakam ।

(*M.*, XXXIII, 164 ; *see also* 161.)

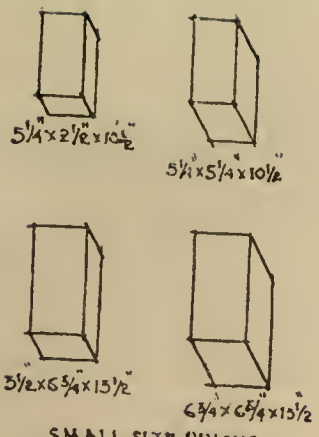
Garbha-gehe tu mānaṁ syāt liṅga-tuṅgaṁ prakalpayet ।

(*M.*, LII, 22 ; *see also* LIII, 4.)

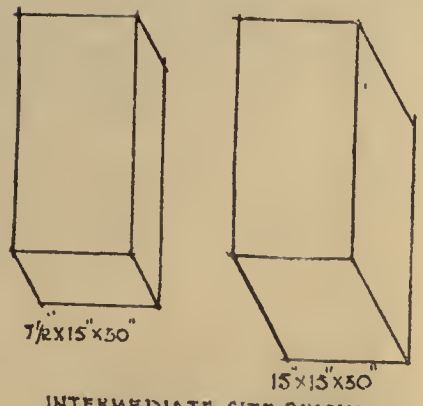
(2) 'And the balance he will apply to building the garbha-gṛiha and enclosure of the goddess's temple.'—(*Ep. Carnat.*, Vol. VIII, Part I, Sagar Taluq, no. 135 ; Roman text, p. 225 ; Transl., p. 119, last para., last line.)

(3) 'His wife (with various praises) Kallard-Siyamma had the shrine (garbba-gṛihada) of the god Sidda-Mallikārjuna renewed.'—(*Ep. Carnat.*, Vol. XII, Gubbi Taluq, no. 29 ; Roman text, p. 41 ; Transl., p. 23, line 8.)

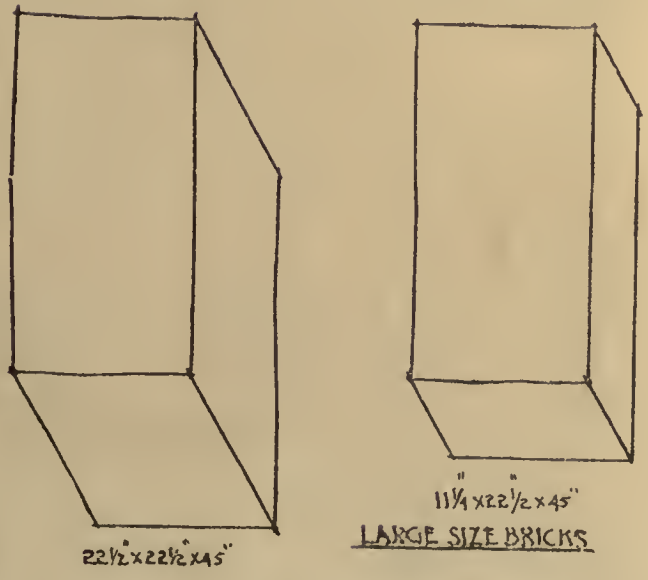
(4) Garbha-gṛiha-sthita-maṇṭapa-śikhara—'the ruined tower over the shrine (of the god Arkanātha).'—(*Ep. Carnat.*, Vol. III, Maḷavaḷḷi Taluq, no. 64 ; Roman text, p. 127, line 3 ; Transl., p. 63.)



SMALL SIZE BRICKS



INTERMEDIATE SIZE BRICKS



LARGE SIZE BRICKS

(5) 'Garbha-gṛiha—sanctum of a temple.'

(6) Vincent Smith's Gloss. (*loc. cit.*) to Cunningham's *Arch. Surv. Reports*.

GARBHA-NYĀSA—Laying the foundation, the foundations.

Mānasāra (Chap. XII, 1–128, named Garbha-nyāsa) :

The foundation is classed under three heads—for buildings (lines 4–169) for villages, etc. (lines 172–186) and for tanks, etc. (lines 188–216).

The last-named foundation, which is meant for a tank, well or pool is said to be as high as the joint palm of man (narāñjali, line 188).

The foundation of buildings is first divided into two classes, as it belongs to temples (lines 4–149) and to human dwellings (lines 155–169). Of temples, those of Vishṇu (lines 4–137) and Brahman (lines 139–149) are illustrated and the others are said to be like these (*cf.* line 132).

Of the human dwellings, there are four classes according to the four castes—Brāhman, Kshatriya, Vaiśya and Śūdra.

The depth of the foundation-pit is stated to be equal to the basement :

Garbhāvaṭasya nimnaṁ syād adhishṭhāna(ṁ)-samonnatam ।

Ishṭakair api pāshāṇaiś chatur-aśraṁ samaṁ bhavet ।

(*M.*, XII, 6–7.)

The details of laying the foundations are given (*M.*, XVII, 6–9) :

The best ground selected for foundations is excavated to the depth of a man's height with uplifted arms. The bottom of the pit thus excavated should be rocky or water, and the pit is filled with sands and water which are closely pressed and hardened by means of wooden hammers shaped like the elephant's foot. Upon such foundations, the strength whereof varies according to the weight of the construction above, various structures are constructed.

From this it would appear that the best soils for receiving foundations are rock, gravel, or closely-pressed sandy earth.

GARBHA-BHĀJANA—The foundation-pit, the excavation.

(*Ibid*, 103.)

GARBHA-MAÑJŪSHĀ(-IKĀ)—The basket-shaped roof upon the foundation-pit, the vault.

(*Ibid*, 47.)

GARBHA-VINYĀSA (*see* GARBHA-NYĀSA)—The arrangement of the foundation, the foundations.

(*M.*, XII, 2.)

Garbha-nyāsa-vidhiṁ vakshye grāmādīnāṁ cha sadmanām ।
Sa-garbhaṁ sarva-saṁpattyair vigarbhaṁ nāśanaṁ bhavet ॥

(*Kāmikāgama*, XXXI, 2-104.)

GARBHA-SŪTRA—The line in the interior or middle, the inner or central line of a foundation.

Garbha-sūtrasya karṇaiś cha dvi-dvi-śaṅkuṁ nikhānayet ।

(*M.*, VI, 105.)

GARBHĀVAṬA—The foundation-pit, the excavation.

(*M.*, XII, 5 ; *see* under GARBHA-NYĀSA.)

GALA (*see* KAṆṬHA)—The neck, a moulding called dado, the frieze of the entablature.

See the lists of mouldings under ADHISHṬHĀNA., UPAPĪṬHA and PRASTARA.

See Kāmikāgama (LIV, 47) under PRASTARA.

GALA-KŪṬA (*see* KŪṬA)—A side-tower, a dome at the neck-part of a building.

GALĀṄGA—Literally neck portion, the middle member, the frieze of the entablature which lies between the architrave and the cornice.

(*See Kāmikāgama*, LIV, 47, under PRASTARA.)

GAVĀKSHA (*see* VĀTĀYANA)—Windows resembling the cow's eye, a latticed window.

Sārdha-gavākshakopeto nirgavāksho'thavā bhavet ।

(*Garuḍa-Purāṇa*, Chap. XLVII, v. 36.)

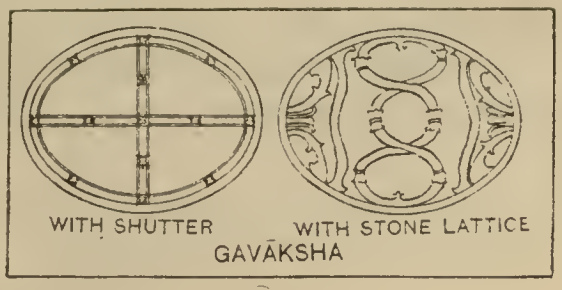
Cf. M., XVIII, 290 ; XX, 81 ; XXXIII, 582, etc.

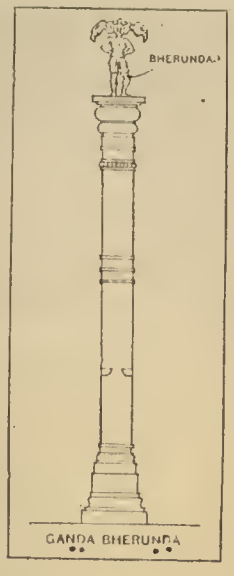
'The chief adornment of the temple at Gaṅgai-koṇḍa-puram is the repetition everywhere on the cells and cornices of the fanlike window ornament resembling a spread peacock's tail.'—(*Ind. Ant.*, Vol. IX, p. 118, c. 1, para. 3, last sentence.)

See Pallava Architecture (*Arch. Surv.*, New. Imp. Series, Vol. XXXIV, Plate CXXII).

See the pierced window in Bhoganandīśvara shrine (*Mysore Arch. Report*, 1913-14, Plate V, fig. 2, p. 14).

GARUDA STAMBHA


WITH SHUTTER
WITH STONE LATTICE
GAVAKSHA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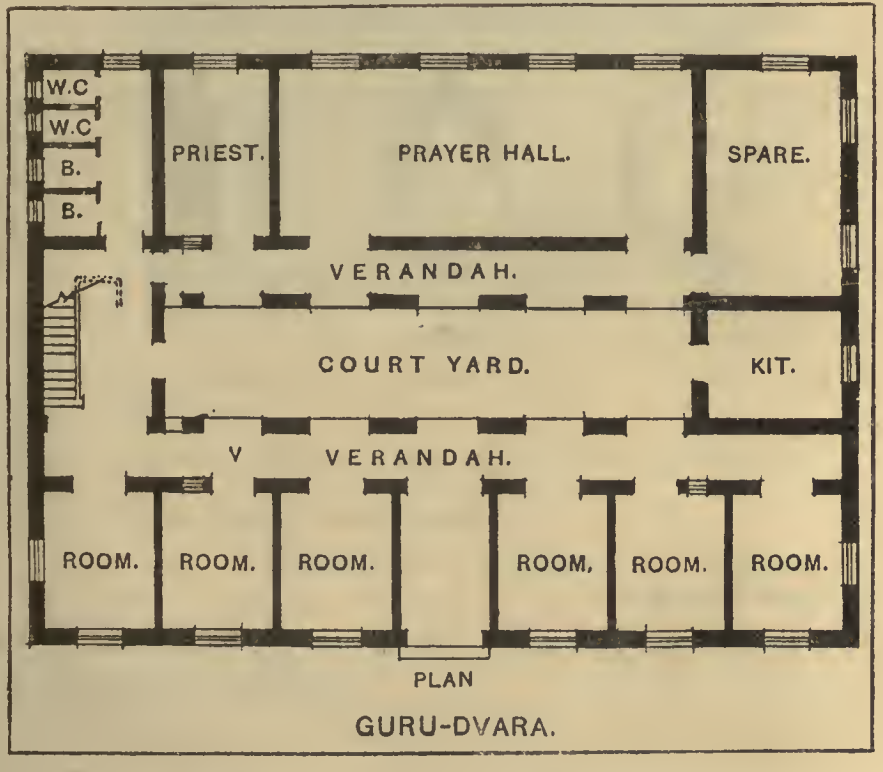
GANDA BHERUNDA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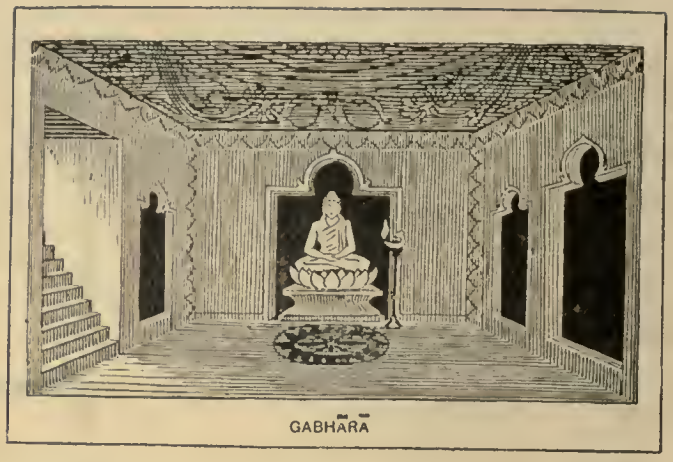


GABHĀRĀ

GAVĀKSHĀKĀRA—Resembling the cow's eye, a moulding or structure shaped like a cow's eye.

In connexion with the bedsteads :

Vṛittākṛitīshṭa-pādānāṁ yuktyā varṇena lepayet ।
Gavākshākāra-yuktyā cha paṭṭikordhve samantataḥ ।
Kuñjarāksham alakshaṁ vā patra-pushpādy-alaṅkṛitam ।

(*M.*, XLIV, 21-23.)

GĀTRA—Literally the body, the columns of a pavilion.

(*Suprabhedāgama*, XXXI, 102-103 ; *see* under MAṆḌAPA.)

GĀṆAVA—A kind of phallus.

(*Kāmikāgama*, L, 35, 37 ; *see* under LIṄGA.)

GIRI-DURGA (*see* DURGA)—A fort, a hill-fort.

Cf. ' In the reign of Chikka-Deva-Rāya-vodeya-raiya the servant of the lord of this village, Biḷugeli Kempar-ājayya's son Dasarajayya began to build the stone fort of Nijagal, which has received another name of Sura-giri-durgga.'

' In 1698 to 1700 the bastions of the fort and the town-gate on the east were completed. In 1701 to 1702 the town-gate on the south was made. In Pārthiva (1705) the elephant-gate on the east, this hall and the chāvaḍi with the tiger-face gate, and the Vighneśvara temple at the town-gate on the south ' (were built).—(*Ep. Carnat.*, Vol. IX, Nelamangala Taluq, no. 65 ; Roman text, p. 54 ; Transl., p. 45.)

GURU-DVĀRA—A Sikh monastery, the Sikh temple where the Grantha Saheb is worshipped. Literally, same as the Jain Tīrthaṅkara or path-maker.

See Vincent Smith's Gloss. (*loc. cit.*) to Cunningham's *Arch. Surv. Reports*.

GUVĀ-VṚIKSHA—A type of round buildings.

(*Garuḍa-Purāṇa*, Chap. XLVII, vv. 21, 23, 28-29 ; *see* under PRĀSĀDA.)

GUHA-RĀJA—A type of building which is 16 cubits wide and has a roof with three dormer-windows.

(1) *Bṛihat-Saṁhitā* (LVI, 25, *J.R.A.S.*, N. S., Vol. VI, p. 319 ; *see* under PRĀSĀDA.)

(2) *Bhavishya-Purāṇa* (Chap. CXXX, v. 32 ; *see* under PRĀSĀDA).

GṚIHA—The house, a building, a room, a hall, a family home.

(*R.-V.*, x, 91-92.)

Gṛihaṁ gehodavasitaṁ veśma sadma niketanam ॥
Niśānta-vastya-sadanaṁ bhavanāgāra-mandiram ।
Gṛihāḥ puṁsi cha bhūmny-eva nikāyya-nilayālayāḥ ॥

(*Amarakōsha*, ii, ii, 4, 5.)

Cf. Sudīpika-gṛiham—'a house of beautiful lamps'.—(Three Inscrip. from Travancore, no. B, line 3, *Ep. Ind.*, Vol. iv, p. 203.)

See M., ix, 7, 8 ; xxxvi, 2 ; xxxvii, 1 ; xl, 78, etc.

GṚIHA-KĀNTA—A class of the five-storeyed buildings.

(*M.*, xxiii, 30-32 ; *see* under Prāsāda.)

GṚIHA-GARBHA (*see* Garbha-nyāsa)—The foundation of a house.

Gṛiha-garbham iti proktaṁ grāma-garbham ihochyate ।
Gṛiha-garbham antar-mukhaṁ syād grāma-garbhaṁ bahir-mukham ।

(*M.*, xii, 167, 216.)

GṚIHA-CHULLĪ—A building with an eastern and western hall, 'a house with two rooms contiguous to each other, but one facing west and the other east.'

(*Bṛihat-Saṁhitā*, liii, 40.)

GṚIHA-PIṆḌI (*see* Piṇḍikā)—The basement of a building.

. . . gṛiha-piṇḍir athochyate ॥
Madhye chāsāvṛitaṁ vāsāvāsa-piṇḍikāndhāriketi cha ।
Saṁjñeyaṁ gṛiha-piṇḍeḥ sayāt . . . ॥

(*Kāmikāgama*, lv, 200-201.)

GṚIHA-PRAVEŚA—The opening of or the first entry into the house, the house-warming ceremony.

Mānasāra (Chap. xxxviii, 1-89, named Gṛiha-praveśa).

The ceremonies in connexion with the opening of and first entry into a house are described in detail (lines 1–90). The consideration of auspicious day and moment, and the worship and sacrifice in this connexion are also described in detail (lines 5–74). The masters of the ceremonies are stated to be the sthapati (architect) and the sthāpaka (lines 14, 15, 16, 17, 58, 73, 74, 83, 85). They lead the procession in circumambulating the village and the compound before the ceremonial entry into a new house (lines 73–90). The guardian-angel of the house (Gṛiha-Lakshmī) is prayed

to after completing the worship and sacrifice to confer happiness, comfort, plenty of wealth, children, health and long life to the master and other members of the family (lines 67–72).

The chapter closes with the description of an elaborate scheme of feeding the Brāhmans and the artists, and of liberal gifts to them for the sake of prosperity and success of the family (lines 84–90). (*See also M.*, IX, 8.)

GṚIHA-MAṄGALA—An auspicious ceremony in connexion with a newly-built house.

Sarva-maṅgala-ghoshaiś cha svasti-vāchana-pūrvakam ।
Paśchāt(d) gṛiha-maṅgalaṁ kuryāt nānā-vastraiś cha śobhitam ।

(*M.*, XXXVII, 55–56.)

GṚIHA(-MĀNA-STHĀNA)-VINYĀSA—The dismensions and situation of houses, the location of various rooms in dwelling houses and temples and palaces.

(1) *Mānasāra* (Chap. XXXVI, 1–96, named Gṛiha-māna-sṭhāna vinyāsa) :

The dimensions of houses in general (lines 6–13) : the breadth of a house is said to be of five kinds, from two or three daṇḍas (4 or 6 yards) to ten or eleven daṇḍas (20 or 22 yards). The length may be equal to, 1¼, 1½, 1¾, or twice of, the breadth.

The situation : houses are built in villages, towns, settlements, suburbs, groves, hermitages, near a hill, and on the banks of a sea or river (lines 1–5) :

Dvi-jātīnāṁ cha sarveshāṁ varṇānāṁ vāsa-yogyakam ।
Gṛihāṇāṁ māna-vinyāsaṁ sthānaṁ cha vakshyate'dhunā ।
Grāme cha nagare vāpi pattane kheṭake'pi vā ।
Vane vā chāśrame vāpi nadyādri(e)ś cha pārśvake ।
Teshāṁ tu veśmanaḥ sthānaṁ kalpayech chhilpavit-tamaḥ ।

In the chapter on pavilions (maṇḍapas) various sorts of houses are stated to be located in different parts of the five courts into which the whole compound is divided. In that chapter houses for various purposes of a family are located in different squares in which a single court is divided, and which have been described in the chapter called Pada-vinyāsa.

The Brahma-sthāna or the central square is stated to be unfit for a residential building (line 15). The temple of the family god is generally built in this part. Round this are constructed all other houses (lines 16–85), such as the house for the master of the family, for his wife, for the children, for servants, for cows, horses, fowls, etc., for kitchen and dining-hall, etc., for guests, for the library or

study, for the daily sacrifices of the upper castes, for amusements and music, for the dancing girls, and for all other domestic purposes. But the distribution of these several detached buildings is left to the choice of the master of the house (line 85).

(2) *Kauṭilīya-Artha-śāstra* (Chap. xxvi, p. 53) :

Ādi-talasya pañcha-bhāgāḥ śālā vāpi, sīmā-gṛihaṁ cha daśa-bhāgikau dvau prati-mañchau, antarā maṇi-harmyaṁ cha samuchchhrāyād ardha-talaṁ, sthūṇāvabandhaś cha ārdhavāstukam uttamāgāraṁ tri-bhāgāntaraṁ vā ishṭakāvabandha-pārśvaṁ, vāmataḥ pradakshiṇa-sopānaṁ gūḍha-bhittisopānam, itarataḥ dvi-hastaṁ toraṇa-śiraḥ, tri-pañcha-bhāgikau dvau kavāṭa-yogau, dvau dvau parighau, aratnir indra-kīlaḥ, pañcha-hasta-maṇi-dvāraṁ, chatvāro hasti-parighāḥ, niveśārdhaṁ has'i-nakhaḥ mukha-samas-saṅkṛimo' saṁhāryo vā bhūmi-mayo vā ।

'Of the first floor, five parts (are to be taken) for the formation of a hall, a well, and a boundary house ; two-tenths of it for the formation of two platforms opposite to each other ; and upper storey twice as high as its width, carvings of images, an uppermost storey half or three-fourths as broad as the first floor ; side-walls built of bricks ; on the left side, a staircase circumambulating from left to right ; on the right a secret staircase hidden in the wall, a top-support of ornamental arches projecting as far as 2 cubits, two door-panels (each) occupying three-fourths of the space, two and two cross-bar (to fasten the door) ; an iron bolt (indrakīla) as long as an aratni (24 aṅgulas) ; a boundary-gate, 5 cubits in width, four beams to shut the door against elephants ; and turrets (hasti-nakha, outside the rampart) raised up to the height of the face of a man, removable or irremovable, or made of earth in places devoid of water.'

(3) The plan of a house having a quadrangular courtyard in the centre and comprising sixteen rooms (*Vāstu-tattva*, Lahore, 1853, p. 1 f.):

In the north-east corner is stated to be (1) the family chapel (deva-gṛiha) ; in the east (2) the room for all things (sarva-vastu-gṛiha), (3) the bathroom (snāna-gṛiha), and (4) the room for churning milk (dadhi-manthana) ; in the south-east corner (5) the kitchen ; in the south (6) the bṛi(vṛi)tasagṛiha (?), (7) the śaina-gṛiha, (? sayana=bedroom), and (8) the lavatory (purīsha-gṛiha) ; in the south-west corner (9) the library (śāstra-gṛiha) ; in the west (10) the study (vidyābhyāsa-gṛiha), (11) the dining-hall (bhojana-gṛiha), and (12) the weeping (reception-)-room (rodana-gṛiha) ; in the north-west corner (13) the granary (dhānya-gṛiha) ; in the north (14) the bedroom or drawing-room (saṁbhoga-gṛiha, or

the house for enjoying oneself in), (15) the store-room (dravya-gṛiha), and (16) the room for invalids or medicine (aushadha-gṛiha).

In this plan the houses face the north where the residential rooms are located. Here north is the best direction, and the west, the east and the south come in order of inferiority. This plan is suitable for western and northern India where the northern and western winds are salubrious.

(4) *Vāstu-pravandha* (II, 25, 26, compiled by Rajakisora Varmma) :

Sthā(Snā)nāgāraṁ diśi prāchyām āgneyyāṁ pachanālayam ।
Yāmyāyāṁ śayanāgāraṁ nairṛityāṁ śāstra-mandiram ॥
Pratīchyāṁ bhojanāgāraṁ vāyavyāṁ paśu-mandiram ।
Bhāṇḍa-kośaṁ chottarsyām aiśinyāṁ deva-mandiram ॥

This is a smaller house with eight rooms. Here the bedroom is located in the south, indicating the southern aspect of the house, suitable for southern and eastern provinces.

(5) *Śilpa-śastra-sāra-saṁgraha* (IX, 24–28) :

Īśānyāṁ devatā-gehaṁ pūrvasyāṁ snāna-mandiram ।
Āgneyyāṁ pāka-sadanaṁ dravyāgāraṁ tathottare ॥
Āgneya-pūrvayor madhye dadhi-manthana-mandiram ।
Agni-pretaśayor madhye ājya-gehaṁ praśasyate ॥
Yāmya-nairṛityayo(r) madhye purīsha-tyāga-mandiram ।
Nairṛityāṁ-bu(?)payor madhye vidyābhāsasya-mandiram ॥
Paśchimānilayor madhye rodanārthaṁ gṛihaṁ smṛitam ।
Vāyavottarayo(r) madhye rati-gehaṁ praśasyate ॥
Uttareśānayor madhye aushadhārthaṁ tu kārayet ।
Nairṛityāṁ sūtikā-gehaṁ nṛipāṇāṁ bhūtim ichchhatām ॥

(6) *Matsya-Purāṇa* (Chap. CCLVI, vv. 33–36) :

Īśāne devatāgāraṁ tathā śānti-gṛihaṁ bhavet ॥
Mahānasaṁ tathāgneye tat-pārśve chottare jalam ।
Gṛihasyopaskaraṁ sarvaṁ nairṛitye sthāpayed budhaḥ ॥
Ba(n)dha-sthānam bahiḥ kuryāt snāna-maṇḍapam eva cha ।
Dhana-dhānyaṁ cha vāyavye karmma-śālāṁ tato bahiḥ ॥
Evāṁ vāstu-viśeshaḥ syād gṛiha-bharttuḥ śubhāvahaḥ ॥

In plans (5) and (6) it should be noticed, the bandha-sthāna (*lit.* place to bind in? slaughter-house, vadha-sthāna), the bathroom and the office (karmma-śālā) are directed to be built outside the (residential building proper). Both these are nine-roomed houses facing the north-east. In this house, rooms are all built in the corner, the four main directions being left entirely vacant. This is stated to bring peace, prosperity and health to householders.

(7) *Agni-Purāṇa* (Chap. cvi, vv. 18–20) :

Pūrvāyāṁ śrī-gṛihaṁ proketam āgneyyāṁ vai mahānasam ।
Śayanaṁ dakshiṇasyāṁ tu nairṛityāṁ āyudhāśrayam ॥
Bhojanaṁ paśchimayāṁ tu vāyavyāṁ dhānya-saṁgrahaḥ ।
Uttare dravya-saṁsthānaṁ aiśānyāṁ devatā-gṛiham ॥
Chatuḥ-śālāṁ tri-śālāṁ vā dvi-śālāṁ chaika-śālākam ।
Chatauḥ-śālā-gṛihāṇāṁ tu śālālindaka-bhedataḥ ॥

This plan is specially meant for houses in towns, etc. (*cf.* vv. 1–12). It recommends the four typical arrangement of houses, namely, rooms being built covering the four sides with the courtyard in the middle ; rooms being on three sides and the fourth side in continuation of the courtyard being left free for light and air ; rooms being built on two sides only ; and rooms being built on one side only, apparently without any courtyard. This is an eight-roomed plan.

(8) *Gṛiha-vāstu-pradīpa* (Lucknow, 1901) quotes from some authority without mentioning his name the following :

Atha nṛipāṇāṁ shoḍaśa-gṛiha-rachanopāyaḥ ।
Snāna-pāka-śayanātra-bhujesva(?)-dhānya-bhaṁḍāra-daivata-gṛihāṇi cha pūrvata(ḥ) syuḥ ।
Tan-madhyas tu mathana-ājya-purīsha-vidyābhyāsākhya-rodana-rataushadha-sarva-dhāma ॥

(9) *Kāmikāgama* (xxxv, 177–191) :

Aiśānyāṁ pachana-sthānaṁ brāhmaṇānāṁ vidhīyate ।

(And of the Kshatriyas to the south-east, of the Vaiśyas to the south-west, and of the Śūdras to the north-west, vv. 177–178).

Pūrvasyāṁ bhojana-sthānam āgneyyāṁ tu mahānasam ।
Yāmyāyāṁ śayana-sthānaṁ nairṛityām āyudhālayaḥ ॥ (179)
Maitra-sthānaṁ tu tatra tatra vāruṇyām udakālayaḥ ।
Goshṭhāgāraṁ cha vāyavyām uttarasyāṁ dhanālayaḥ ॥ (180)
Nitya-naimittikārthaṁ syād aiśānyāṁ yāga-maṇḍapam ।
Kāñji-lavaṇayoḥ pātraṁ prāg-udag-diśi vinyaset ॥ (181)
Antarikshe' pi vā chullyulūkhalī savitā api ।
Anna-prāśanam āryāṁśe chendrāgnyāṁ cha savitrake ॥ (182)
Vivasvad-aṁśe śravaṇaṁ vivādo maitra-deśake ।
Kshaudram indrajaye vidyād vāyau some cha vā bhavet ॥ (183)
Vitathopanayoś chaiva pitṛi-dauvārika pade ।
Sugrīve pushpa-dante cha prasūti-gṛiham ishyate ॥ (184)
Apavatse tu kośaḥ syāt kuṇḍam āpe vidhīyate ॥ (184*a*)
Aṅkaṇam tu mahendrāṁśe peshaṇī cha mahīdhare ॥ (185)
Arishṭāgāram ishṭaṁ syāt tatropaskāra-bhūmikam ॥ (186)
Vāhanaṁ dvāra-yāme syāt snāna-śālā cha vāruṇe ।

Asure dhānya-vāsaḥ syād āyudhād (?) indra-rājake ‖ (187)
Mitravāsas tathā mitre roge volūkhalaṁ matam ।
Bhūdare kośa-gehaṁ syān nāgāṁśe ghṛitam aushadham ‖ (188)
Jayante chāpavatse cha parjanye cha śive kramāt ।
Visha-pratyaushadhaṁ chaiva kūpe deva-gṛihaṁ bhavet ‖ (189)
Ṛiksha-bhallāṭa-someshu bhaved āsthāna-maṇḍapam ‖ (191)

This is a plan with the southern aspect. It comprises thirty rooms and the arrangement is much like in the *Mānasāra.*

Compare the *Mānasāra* (XL, 71–111, antaḥ-śālā, or houses in the inner court ; 112–153, bahiḥ-śālā, or buildings forming the part of the palace in the outer court, *see* under RĀJA-HARMYA.)

The internal arrangement of rooms in small dwelling houses is essentially like those described above. In the large edifices, palaces and mansions the buildings of various storeys are artistically arranged. There are stated to be one to seven enclosures in palaces of kings of nine orders. These enclosures are surrounded by walls, each of which is furnished with a large gateway known as the gopuram. In the innermost court (antarmaṇḍala, with the gateway called the dvārasobhā) are erected the residential palaces of the king, queens and princesses, and would be analogous to the Muslim harem. In the second circle (antanihara, with the gateway called dvāra-śālā) are built the edifices for the crown prince and other princes, royal priests, ministers and such other people. In the middle court (madhyamā hārā, with the gateway dvāra-prāsāda) are built mansions for council hall, office rooms, and quarters for the resident members of the council, high civil and military officers, resident clerks and others. Within this enclosure in some properly secured lanes are built secret residences for the king. In the fourth enclosure (prākāra, with gateway dvāra-harmya) are quartered the foregin offices, for negotiating war, peace and such other matters. In the fifth court (mahāmaryāda, with the gateway called the great gate-house) are erected military quarters, barracks, and offices of smaller importance. The sixth and the seventh enclosures, which are not included in the smaller palaces, are reserved for the defence forces, guards, royal stables, houses for domestic animals, zoological gardens, etc. which are sometimes accommodated in the fifth court also. Prisons, cemeteries, cremation grounds and temples of certain fearful deities are quartered beyond the palace compounds. Temples are built within each court. The pleasure-gardens, orchards, tanks, etc. are suitably built within all the enclosures. In each of the enclosures mansions of one to twelve storeys are artistically arranged in rows varying from one to ten, while the gate-houses are furnished with one to seventeen storeys.

The exact situation of particular private and public buildings is specified. Thus it is stated that the main royal chapel should be built in the central plot known as the Brahmapīṭha, and the public audience hall in the quarter of Yama, Soma, Vāyu, or Nairṛita in accordance with the situation of the palace in a particular province or city, and so forth.

For fuller details *vide* the writer's article *A Peep into the Early Hindu Architecture*,—The *Modern Review*, September, 1934, pp. 282–287.

GṚIHA-MUKHA—A door, a façade, the exterior, front or face of a building.

Dānaṁ ghara-mukha ।

(Karle Cave Inscrip. nos. 4, 6, *Ep. Ind.*, Vol. VII, pp. 52–53.)

'A façade implies also the architrave and sculpture round the door with the arc over it.' Dr. Burgess.—(Karle Inscrip. no. 4, *Arch. Surv.*, New Imp. Series, Vol. IV, p. 90, note 4.)

GṚIHA-RĀJA (*see* GUHA-RĀJA)—A type of building.

(1) *Bhavishya-Purāṇa* (Chap. CXXX, v. 32 ; *see* under PRĀSĀDA).

(2) *Agni-Purāṇa* (Chap. CIV, vv. 16–17 ; *see* under PRĀSĀDA).

(3) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 21–22, 26–27 ; *see* under PRĀSĀDA).

GṚIHA-STAMBHA—The main column of the house, the pillar regulating the whole composition.

Kuḍya-stambhe gṛiha-stambhe harmya-garbhaṁ vinikshipet ।

(*M.*, XII, 132.)

See more details under STAMBHA.

GEHA(-KA)—A hall or room, a house, a habitation.

Gopuraṁ tri-talaṁ nyāsaṁ lakshaṇaṁ vakshyate'dhunā ।
Dvi-bhāgaṁ bhitti-vistāraṁ paritaḥ śeshaṁ tu gehakam ।

(*M.*, XXXIII, 489, 492.)

GOKARṆA—A measure, the distance between the tips of the fully stretched thumb and the ring-finger.

(1) Tālaḥ smṛito madhyamayā gokarṇaś chāpy-anāmayā ।

(*Brahmāṇḍa-Purāṇa*, Part I, 2nd anushaṅga-pāda, Chap. VII, v. 97.)

(2) Aṅgushṭhānāmikā-yuktaṁ gokarṇam iti saṁjñikam ।

(*Suprabhedāgama*, XXX, 22.)

GOKHLA—The niche, a recess in a wall.

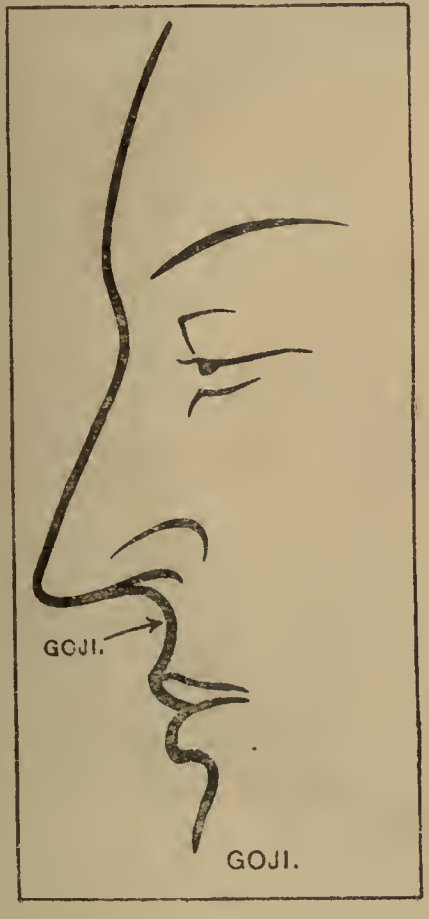
'In the east wall of the maṇḍapa on each side, is a gokhla or niche for images, and in that on the south side is a defaced Gaṇeśa.'

'In the vestibule to the shrine are also small recesses one on each hand.'

(The Temple at Amarnath, *Ind. Ant.*, Vol. III, p. 318, c. 1, para. 2, middle.)

GHATIKĀ-STHĀNA.

GOPĀNA OR OVOLO



GOJI.

GRĀHA-KUṆḌALA.

GOJI—The septum of the nose, the bridge-like part between the two nostrils connecting the tip of the nose with the surface of the upper lip of an image.

(*M.*, LXV, 105, etc., *see* the lists of limb under TĀLA-MĀNA.

GOTRA—A cowstall (Roth. *St. Petersburg Dictionary*).

GOPĀNA—(GOPĀNAKA)—A moulding, the entablature, the beam.

A moulding of the pedestal generally placed between a cyma and cavetto or a cyma and fillet (*M.*, XIII, 95, 100, etc.; *see* the list of mouldings under UPAPĪṬHA).

A moulding of the base (*M.*, XIV, 32, etc.; *see* the lists of mouldings under ADHIṢṬHĀNA).

A synonym of the entablature (*M.*, XVI, 19, *see* under PRASTARA).

A beam-like member of the single-storeyed buildings (*M.* XIX, 46).

A similar member of the buildings of two to twelve storeys.

(*See M.*, XX, 25, etc.)

A moulding of the entablature :

Daṇḍikordhve valayaṁ gopānaṁ syāt tad-ūrdhvataḥ ।

(*Kāmikāgama*, LIV, 34.)

Cf. Gopānasī tu valabhi-chhādane vakra-dāruṇi ।

(*Amarakōsha* II, ii, 15.)

GOPURA—Probably originated from Vedic *Gomati-pur* and epic *Go-gṛihar*, the fortified extensive cowstalls, and connected with the divine bull, thus a gate-house, doors in general, the colossal buildings over or near the gate giving entrance to a city, temple, monastery, etc.

Pura-dvāraṁ tu gopuram ।
Dvāra-mātre tu gopuram ।

(*Ibid*, ii, 16 : III, iii, 182.)

(1) P āsādāt pāda-hīnaṁ tu gopurasyochchhrāyo bhavet ।

(*Agni-Purāṇa*, Chap. XLII, v. 22.)

(2) Prākāra-samaṁ mukham avasthāpya tri-bhāga-godhā-mukhaṁ gopuraṁ kārayet—"A turret above the gate and starting from the top of the parapet shall be constructed, its front resembling an alligator up to three-fourths of its height."—(*Kauṭilīya-Artha-śāstra*, Chap. XXIV, p. 53.)

(3) Śāla-gopurayos tuṅgas tv-adhikaś chāpi mūlataḥ ।
Gopurasyāpy-alaṅkāraṁ śālālāṅkāravan nayet ॥
Sabhākāra-śiro-yuktaṁ śālākāra-śiraḥ-kriyam ।
Maṇḍapākara-saṁyuktaṁ chūli-harmya-vibhūshitam ॥

Agrato'lindakopetam aṭṭālaṁ sālakāntare ।
Gopurasya tu vistāra-tri-bhāgād eka-bhāgikam ॥
Chatur-bhāgaika-bhāgas tu pañcha-bhāgaika-bhāgikaḥ ।
Nirgamo gopurāṇāṁ tu prākārād bāhyato bhavet ॥
Gopuraṁ cha khalurī cha mūla-vāstu-nirīkshitam ।
Antare rāja-devīnāṁ gṛihāṇy-antar-mukhāni cha ॥

(*Kāmikāgama*, xxxv, 124-128.)

In the above instance, it should be noticed, the gopura or gate-house does not belong to a temple ; it is the part of a residential house.

(4) *Rāmayāna* : vi, 75, 6, etc. : Gopurāṭṭa-pratolīshu chāryāsu ।

(5) *Mahābhārata* :

iii, 173, 3 : Puram gopurāṭṭālakopetam ।

iii, 207, 7 : Mithilāṁ gopurāṭṭālakavatīm ।

These two examples will show that gopura denotes gate-houses of palaces and cities, and that they need not necessarily belong to temple alone.

(6) *Mānasāra* :

The gate-house of a town (*M*, x, 48).

In connexion with the height of storeys (bhūmi-lamba) :

Devatālayānāṁ nṛipāṇāṁ śālā-gopure (c)vam uttuṅgam ।

(*M.*, xi, 113.)

In connexion with the base (*M.*, xiv, 415).

In connexion with the column :

Prāsāde maṇḍape vāpi prākāre gopure tathā ।

(*M.*, xv, 433.)

In connexion with the windows (*M.*, xxxiii, 594)

In connexion with images of Yakshas Vidyādharas, etc. :

Jānv-uśrita-hastau gopurodhṛita-hastakau ।
Evaṁ vidyādharaḥ proktaḥ sarvābharaṇa-bhūshitaḥ ।

(*M.*, lviii, 16-17.)

Chapter xxxiii (named Gopura) 1-601 :

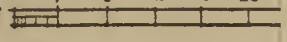
The gate-houses are built for temples and residential buildings alike (line 1). Hence it will be inaccurate to suppose that gopuras are constructed only for temples. In the *Mānasāra*, rules are laid down for gopuras belonging to residential buildings of various descriptions (*cf.* lines 2-601).

They are built in front of each of the five courts into which the whole compound of a house is divided. The gopura belonging to the first (antar-maṇḍala) is technically called the dvāra-śobhā or the beauty of the gate (line 8) ; that belonging to the

THE GATE HOUSES

NOTE:~

ALL THESE GATE HOUSES ARE F
TEMPLES AND RESIDENTIAL BUI
IN RESIDENTIAL BUILDINGS TH
SHOULD ALWAYS BE LESS IN NUMB
THAN THE MAIN EDIFICE BUT NOT

SCALE OF 

LENGTH (IN PLAN) = 1¼ WIDTH
HEIGHT (IN ELEVATION) = 1½ WIDT

DVĀRA-ŚOBHĀ TYPE

FOR THE INNERMOST

second court is known as dvāra-śālā or gate-house (line 9). The gate-house of the third court is called dvāraprāsāda (line 9), and of the fourth court dvāra-harmya (line 9). The gate-house of the fifth court or at the furthest boundary (mahā-maryādā) is known as mahā-gopura or the great gate-house (line 10).

The gopuras are furnished with as many as sixteen storeys (lines 97, 103). They are divided into ten classes (line 564) with regard to the number of architectural members designated as śikharas or cupolas, domes (stūpikā), side-tower or dome (gala-kūṭa) and vestibules (kshudra-nāsī) (lines 536–564). A gopura is thus technically called Śrībhoga when its śikhā (spire) is like śālā (hall), it has a circular surrounding dome and is furnished with a side-tower, four small vestibules and eight large vestibules (lines 553–564). The remaining nine classes are called respectively Śrīviśāla, Vishṇu-kānta, Indra-kānta, Brahma-kānta, Skanda-kānta, Sikhara, Stūpika and Saumya-kānta (lines 556–564).

The fifteen kinds of gate-houses referred to above may have one to sixteen or seventeen storeys. But the details of five storeys only are given, others being left to the discretion of the architects and stated to be built in the same way as those five storeys illustrated so minutely.

The measurement, both absolute and comparative, of length, breadth, and height of each storey belonging to each of the fifteen kinds of gate-houses is described at great length. The ornaments and mouldings of each storey are also given in detail. The central or main hall as well as all other rooms, together with different parts such as pillars, entablatures, walls, roofs, floors, and windows, etc., are described in great detail (*cf.* lines 2–601).

(7) Gate-tower (Hampe Inscrip. of Krishnaraya, line 33, north face, *Ep. Ind.*, Vol. I, p. 336).

(8) Tower (Ranganath Inscrip. of Sundarapandya, v. 7, *Ep. Ind.*, Vol. III, pp. 12, 15).

(9) Durggaṁ cha Tāmranagarīm abhito vyadhatta prākāram uṁnatam udaṁchita-gopuraṁ saḥ—'he surrounded Tāṁranagari with a wall surmounted by towers.'—Hultzsch—(Chebralu Inscrip. of Jaya, v. 27, *Ep. Ind.*, Vol. V, pp. 147, 149.)

(10) Gate-tower :

Vapra-gopura-mayair nava-harmaiḥ—'by erecting new buildings adorned with a wall and a gate-tower.'—(Mangalagiri Pillar Inscrip., v. 29, *Ep. Ind.*, Vol. VI, pp. 121, 131.)

(11) Vapra-gopura-yutair-nava-harmyaiḥ (verse 26).
Gopura-prākārotsava-maṁṭapair upachitaṁ (verse 27).
Śikhara-maṁṭapa-gopurālu (line 116).
(Kondavidu Inscrip. of Krishnaraya, vv. 26, 27, line 116, *Ep. Ind.*, Vol. VI, pp. 236, 237, 321, 322.)

(12) Vipulottuṁga-gopuraṁ deva-maṁdiram—'the temple of god (adorned) with lofty towers.'—(Krishnapuram Plates of Sadasivaraya, v. 56, *Ep. Ind.*, Vol. IX, pp. 336, 341.)

(13) 'In it (Taulava) country, on the south bank of the Ambu river shining like the Śrī-puṇḍra (central sectarian mark on the forehead of Vaishṇavas) is Kshemapura, like Purandara (Indra's city), with glittering gopuras (temple-towers).'—(*Ep. Carnat.*, Vol. VIII, Part I, Sagar Taluq, no. 55; Transl., p. 100.)

(14) 'Built (in the year specified) the tower of the temple (gopura) of the god Śivamiśvaram udaiyar.'—(*Ep. Carnat.* Vol. IX, Bangalore Taluq, no. 139*a*; Transl., p. 26; Roman Text, p. 32.)

(15) 'Brought to the door of the gopura of the maṇṭapa facing mukha-maṇṭapa of the god Varadarāja, and having the wood-work done by the hand of the carpenter Bevoja's son Chāja-oja, and having the door set up and the iron work done by the hand of the blacksmith, Anjala Divingoja.'—(*Ep. Carnat.*, Vol. X, Malur Taluq, no. 3; Roman Text, p. 186; Transl., p. 154.)

(16) Gate-pyramid, gate-way tower.—(Colonel B. R. Branfill. *Ind. Ant.*, Vol. IX, p. 117, c. 1, p. 119, c. 1.)

(17) Nūtana-vāgi gopuravaṁ kaṭṭiśi gopura-pratishṭhe suvarṇa-kalasa-pratishṭhe saha māḍiśi—'erected a new gopura with golden finials in the Chāmuṇḍeśvarī hill.'—(*Ep. Carnat.*, Vol. III, Mysore Taluq, no. 20; Roman Text, p. 6; Transl., p. 3.)

(18) Vīraś śrī-chika-deva-rāya-nṛipatī reme pure saṁvasan |
Śrīraṅge ramaṇīya-gopuravati kshoṇī-vadhū-bhūshaṇe ||
The heroic king Chikka-Deva Rāya, residing in the beautiful city Śrīraṅga having (i. e. which is furnished with) splendid gate-ways (? gate-house) an ornament to the lady Earth . . .

It should be noticed that from this instance it s clear beyond doubt that gopuras or gate-houses were constructed not only in connexion with temples but also as parts (of residential houses and) of the city-gates.
(*Ep. Carnat.*, Vol. III, Malavalli Taluq, no. 61; Roman Text, p. 126, line 11 f.; Transl., p. 62.)

(19) 'With his approva' causing a gopura of seven storeys to be newly erected on the eastern side of the holy presence dedicated the gopura together with its golden kalaśas, for the services of the god, to

continue as long as sun and moon.'—(*Ep. Carnat.* Vol. III, Nānjangūd Taluq, no. 1 ; Transl., p. 95 ; Roman Text, p. 183.)

(20) Meroś śriṅgam utāndhakāri-bhavanaṁ prāleya-pṛithvī-dhṛitāḥ kuṭaṁ kiṁ muravairi-nirmmita-mahā-dvārāvati-gopuram ।
Kiṁ vā kiṁ maya-śilpa-sāra-sahitaṁ pāṇḍūdbhavānāṁ sabhā-dvāraṁ guṇḍa-chamūpa-nirmita-mahāshaṭkaṁ samujṛimbhate ॥
Sapta-dvīpa-samudra-gotra-dhara-loka-chhanda-ṛishyaśvasaṁ khyātāneka-jagan-nidhāna-mahanīyāśesha-vastu-śriyām ।
Sāraṁ gopura-nishṭha-sapta-bhuvana-vyājena shaṭko mahān ekībhūtam ivāvabhāti satataṁ śrī-guṇḍa-daṇḍādhipaḥ ॥

'Rebuilt with seven storeys the gopura, over the doorway (and its praise).'

(*Ep. Carnat.*, Vol. V, Part I, Belur Taluq, no. 3 ; Roman Text, III, p. 103, line 10 f ; Transl., p. 45.)

(21) 'In front of the temple of Harihara-nātha, he made a wide and beautiful gateway (gopura) of five storeys, adorned with golden kalaśas.'—(*Ep. Carnat.*, Vol. XI, Dāvaṇagere Taluq, no. 36 ; Transl., p. 47, Roman Text, p. 77–78 ; *see* Introduction, p. 32, para. 2, line 3 f.)

(22) *See* 'Views of the second main entrance-gopura, Kailāśa-nātha temple.'—(Pallava Architecture, *Arch. Surv.*, New Imp. Series, Vol. XXXIV, Plate V.)

GOPURĀKĀRA(-KRITI)—Buildings of the gate-house shape.

Kechid vai mālikākārā kechid vai gopurākṛitiḥ ॥
Mātṛīṇām ālayaṁ kuryād gopurākāram eva tu ॥

(*Suprabhedāgama*, XXXI, 123, 129.)

GO-MAṬHA—Literally a monastery for cows, a cowstall.

Yo dharmma-puṁjaṁ hi vichārya v(b)uddhyā so'kārayad goma-(ṭh)a-nāmdheyam ॥
V(b)aṭihādiṁ-pure ramye go-maṭ(ṭh)aḥ kāritaḥ śubhaḥ ।
Aśrayaḥ sarvva-jantūnaṁ kailās(ś)ādrir ivāparaḥ ॥

'Caused to be made the place known by the name of Gomaṭha (?).'

'This auspicious gomaṭha (?) was caused to be made in the beautiful town of Baṭihādim. (It is) a shelter to all being like another Kailāśa.'—(R. B. Hira Lal, B.A.)

But fom the context the meaning of go-maṭha (*lit.* house for cows) seems certain : it is paśu-śālā or sheds for animals.

(Batihagarh Stone Inscrip., vv. 8, 9, *Ep. Ind.*, Vol. XII, pp. 46-47.)

GOSHṬHA—A cowstall.

GOSHṬHA-PAÑJARA (*see* PAÑJARA)—The niche or recess in the wall which generally contains a statue, and sometimes serves as a decoration.

GOSHṬHI-(KA)—A committee, trustees, the managing committee of a building, a club-house.

Members of Pañch or committee entrusted with the management of religious endowments. Prof. Bühler.—(*Ep. Ind.*, Vol. I, p. 190, note 50; 'trustee,' Dr. Hultzch, *Ind. Ant.*, Vol. XI, p. 338, last line of the text.)

Cf. Goshṭhika-bhūtena idaṁ stambhaṁ ghaṭitam I

(Deogaḍh Pillar Inscrip. of Bhojadeve of Kanauj, no. A, line 9, *Ep. Ind.*, Vol. IV, p. 310, 829, note 5.)

The managing committee of a building :

Garishṭha-guṇa-goshṭhyadaḥ samudadīdharad-dhīra-dhīru-dāram
atisuṁdaraṁ prathama-tīrthankṛin-maṁdiram II

(Bijapur Iriscrip. of Dhavala of Hastikundi, v. 34, *Ep. Ind.*, Vol. X, p. 22.)

GEYA—A class of buildings.

(*Kamikāgama*, XLV, 58*a*–59, *see* under MĀLIKĀ.)

GRĀMA (*cf.* NAGARA)—A village, slightly different from towns and cities in size mostly.

(1) 'The primitive sense of this word, which occurs frequently from the *Ṛig-Veda*[1] onwards, appears to have been village. The Vedic Indians must have dwelt in villages, which were scattered over the country, some close together,[2] some far apart and were connected by roads.[3] The village is regularly contrasted with the forest (araṇya), and its animals and plants with those that lived or grew wild in the woods.[4] The villages contained cattle, horses, and other domestic animals, as well as men.[5] Grain was also stored in them.[6] In the evening the cattle regularly returned thither from the forest.[7] The villages were probably

[1] I, 44, 10; 114, 1, ii, 12, 7 (perhaps to be taken as in 10); X, 146, 1, 149, 4, etc., *A-V.*, IV, 36, 7, 8, V. 17, 4, VI, 40, 2, etc., *Vājasaneyi-Saṁhitā*, III, 45, XX, 17, etc.

[2] *Śatapatha-Brāhmaṇa*, XIII, 2, 4, 2, *Aitareya Brāhmaṇa*, III, 44.

[3] *Chhāndogya-Upanishad*, VIII, 6, 2.

[4] Animals : *R-V.*, X, 90, 8, *A-V.*, II, 34, 4, III, 10, 6, 31, 3, *Taittrīya-Saṁhitā*, VII, 2, 2, 1, *Kāṭhaka-Saṁhitā*, VII, 7, XIII, 1, *Vājasaneyi-Saṁhitā*, IX, 32, *Pañchaviṁśa-Brāhmaṇa*, XVI, 1, 9, *Śatapatha-Brāhmaṇa*, III, 8, 4, 16, etc. Plants : *Taittirīya-Saṁhitā*, V. 2, 5, 5, VII, 3, 4, 1, etc.

[5] *A-V.*, IV, 22, 2, VIII, 7, 11, etc.

[6] *Bṛihadāraṇyaka-Upanishad*, VI, 3, 13 (Kāṇva, 22, Mādhyamdina).

[7] *R-V.*, X, 149, 4, *Maitrāyaṇī-Saṁhitā*, IV. 1, 1.

open, though perhaps a fort (pur) might on occasion be built inside.[1] Presumaby they consisted of detached houses with enclosures, but no details are to be found in Vedic literature. Large villages (mahāgrāmaḥ) were known.'[2]

(Professors Macdonell and Keith, *Vedic Index*, Vol. I. pp. 244-245.)

(2) *Kāmikāgama* (xx, 4, the definition) :

Vipraiṙ athānyair varṇair vā bhogyo grāma udāhṛitaḥ ॥

The situation of the village-gods and temples (*ibid.*, xxvi, 1–41).

The general arrangement (*ibid.*, xxviii, 1–21).

Further details of the same (*ibid.*, ix, 1–9 and xxx, 1–22).

Cf. Jāty-otkarsha-vaśenaiva sthānaṁ yuktyā prakalpayet ।
Utkṛishṭānāṁ samīpe syān nikṛishṭānāṁ tu dūrataḥ ॥

(*Ibid.*, xxx, 9.)

(3) *Brahmāṇḍa-Purāṇa* (Part I, 2nd anushaṁga-pāda, Chap. vii, vv. 105, 111 ; *see also* v 94) :

Kheṭānāṁ cha purāṇāṁ cha grāmāṇāṁ chaiva sarvaśaḥ ।
Tri-vidhānāṁ cha durgāṇāṁ parvatodaka-dhanvinām ॥
Nagarād yojanaṁ kheṭaṁ kheṭād gramo'rddha-yojanam ।
Dvi-krośaḥ parama-sīmā kshetra-sīmā chatur-dhanuḥ ॥

(4) *Kauṭilīya-Artha-śāstra* (Chap. xxii, p. 45, 46) :

Śūdra-karshaka-prāyaṁ kula-śatāvaraṁ pañcha-śata-kulaparaṁ grāmaṁ krośa-dvi-krośa-sīmānam anyonya-rakshaṁ niveśayet ।
Nadī-śaila-vana-ghṛishṭi-darī-setubandha-śālmalī-śamī-kshīra-vṛikshān anteshu sīmnāṁ sthāpayet ।
Ashṭa-śata-grāmyā madhye sthānīyaṁ chatuś-śata-grāmyā droṇa-mukhaṁ dvī-śata-grāmyā khārvaṭikaṁ daśa-grāmī-saṁgraheṇa saṁgrahaṇaṁ sthāpayet ।

'Villages consisting each of not less than a hundred families and of not more than 500 families of agricultural people of Śudra caste, with boundaries extending as far as a krośa (2,250 yards.) or two, and capable of protecting each other shall be formed. Boundaries shall be denoted by a river, a mountain, forests, bulbous plants, caves, artificial buildings (? setubandha=bridge) or by trees such as śālmalī śamī and milky trees.'

'There shall be set up a sthānīya (fortress of that name) in the centre of eight hundred villages, a droṇa-mukha in the centre of

[1] As now-a-days, *see* Zimmer, Altindisches Leben, 144, citing Hugel, Kashmir, 2, 45.

[2] *Jaiminiya-Upanishad-Brāhmaṇa*, iii, 13, 4.

four hundred villages, and a samgrahaṇa in the midst of a collection of ten villages.'

(5) *Yājñavalka-Saṁhitā* (II, 167, etc.) :

Dhanuḥ-śataṁ pariṇāho grāma-kshetrāntaraṁ bhavet ।
Dve śate kharvaṭasya syān nagarasya chatuḥ-śatam ॥

(6) *Manu-Saṁhitā* (VIII, 237, etc.) :

Dhanuḥ-śataṁ parīhāro grāmasya syāt samantataḥ ।
Śamyāpātās trayo vāpi tri-guṇo nagarasya tu ॥

(7) *Mahābhārata* (XXII, 69, 35) :

Ghoshān nyaseta mārgeshu grāmān utthāpayed api ।
Praveśayech cha tān sarvān śākhā-nagareshv-api ॥

Ibid, 2, 5, 81 :

Kechid nagara-gupty-arthaṁ grāmā nagaravat kṛitāḥ ।

(8) *Mānasāra*, Chap. IX (named Grāma), 1–538 :

According to shape the villages are divided into eight classes, namely, Daṇḍaka, Sarvatobhadra, Nandyāvarta, Padmaka, Svāstika, Prastara Kārmuka, and Chatur-mukha (lines 2–4). (For the plans represented by these eight names, *see* Rām Rāz, *Ess. Arch. of Hind.*, Plates XLIII to XLVI, and the writer's illustrations.) The measurement, the ground plans, the offerings to the presiding deity, the internal arrangement, the laying out of the houses, and the ceremonial opening of new buildings are described in order (lines 5–8) :

Prathamaṁ grāma-mānaṁ cha dvitīyaṁ padaṁ vinyaset ।
Tṛitīyaṁ tad-baliṁ datvā chaturthaṁ grāma(ṁ) vinyaset ।
Pañchamaṁ gṛiha-vinyāsaṁ tatra garbhaṁ vinikshipet ।
Shaṭkaṁ gṛiha-praveśaṁ cha tan-mānam adhunochyate ।

The general plan (lines 95–503) :

Each village is surrounded by a wall made of brick or stone, strong and high enough to prevent leaping over (lines 143, etc.). Beyond this wall there is a ditch broad and deep enough to cause a great obstruction in the event of an attack on the village (lines 143, etc.). There are generally four main gates at the middle of the four sides and as many at the four corners (lines 109–110, 144, etc.). Inside the wall there is a large street around the village. This street is generally used for circumambulation on some special occasion, daily round of the police, open-air drive and similar matters of public concern. Two other large streets are those which run from one gate to another in the middle of the wall on each side. They intersect each other at the centre of the village, where a temple or a hall is generally built for the meeting of the villagers. The village is thus divided into four main blocks, each of which is again sub-divided into many blocks by streets which are always straight from one end to the other of a main block. The

ground-floor of the houses on the main streets are used as shops. The surrounding street has footpaths and houses only on one side. These houses are mainly public buildings, such as schools, colleges, libraries, guest-houses, etc. All other streets generally have residential buildings on both sides. The houses high or low are always uniform in make (line 500, *see also* line 501). Congestion is carefully avoided. The drains or jala-dvāra (*lit.* water-passage) are made towards the slope of the village. Tanks and ponds are dug in all the inhabited parts and located in such quarters as can be conveniently reached by a large number of inhabitants. The temples of public worship as well as the public commons, gardens and parks are similarly located. The people of the same caste or profession are generally housed in the same quarter.

(9) The following conclusions drawn by Mr. E. B. Havell will correctly elucidate some of the points referred to above (*Ancient and Medieval Architecture of India*, pp. 9, 13, 12) :

'The experience of many generations had proved that they (plans of villages) were the best for purposes of defence, and gave the most healthy, pleasant and practical layout for an Indian village or town. The easterly axis of the plan ensured that the principal streets were purified by the rays of the sun sweeping through them from morning till evening: while the intersection of main streets by shorter ones running north and south provided a perfect circulation of air and the utmost benefit of the cool breezes.'

'The *Mānasāra* recognizes forty different classes of villages and towns according to the extent of the lands owned by them : commencing with a village-unit which was 500 daṇḍas, or 4,000 feet square, so that the extent of the largest cities would be 20,000 daṇḍas or about 30 English miles square. Of this area about one-third was devoted to building space, and the rest to the agricultural lands owned by the community. . . . In the description of Ayodhyā given in the *Rāmāyaṇa* (*see* under NAGARA), the proportion between its breadth and length is as one is to four. Pāṭalīputra was about 9 miles in length and 1½ miles in breadth. Hindu Gaur was also a long rectangle, one of the long sides generally faced a lake or river, an arrangement which provided bathing facilities for all the inhabitants and obviated the necessity of building defensive works all round.'

'The *Mānasāra* gives the maximum width of the main village-streets as 5 daṇḍas (a daṇḍa, rod or pole=8 feet). The others varied in width from 1 to 5 daṇḍas. The size of a single cottage was reckoned as being 24 feet by 16 feet to 40 feet by 32 feet. They were generally grouped together by fours, so as to form an inner square or quadrangle. The magic of the square depends on the fact that it afforded the best protection for the cattle of the joint household when they were driven in from pastures every evening.'

(10) ' Of stone-built walls, such as ancient Indian fortified village or town possessed, there is an extant example older than the sixth century B. C. in the hill-fortress of Giribraja, near the modern Rajgir, said to have been planned by a master-builder called Mahā-govinda.'—(Rhys Davids, *Buddhist India*, p. 37.)

(11) Grāma-nagara-kheḍa-karvvaḍa-maḍamba-droṇa-mukha-paṭṭanaṁ galimdam aneka-māṭa-kūṭa-prāsāda-devāyatanāni galiḍampppuva-agrahāra pattanamgalimdam atisayav-appa. . . . ।

' (At Teridala, a merchant-town situated in the centre and the first in importance among the twelve (towns) in the glorious Kundi Three Thousand, adorned, with)—villages, towns, hamlets, sea-girt towns, and chief cities, with elegant mansions, palaces and temples, and with shining agrahāra-towns in the country of Kuntala. . . . '

(Old Kanarese Inscrip. at Terdal, line 58, *Ind. Ant.*, Vol. XIV, pp. 19, 25.)

(12) ' With myriads of people, practices of virtue, agreeable occupations, streams of the (nine) sentiments, pleasure-gardens, separated lovers, splendid tanks, full lotus beds, gilded boats for spring festivals, ghaṭikā-sthānas (religious centres), the supports of dharmma and mines of enjoyment, moats which were as if the sea being overcome had returned here on account of the collection of gems, groups of the lotus faces of beautiful women fair as the moon—(Grāma-nagara-kheḍa-kharvvaṇa-maḍamba-droṇa-mukha-pura-pattana-rājadhānī)—on whatever side one looked, in these nine forms did the Kuntala-deśa shine.' (It should be noticed, that the passage within brackets is almost identical with the corresponding passage in quotation no. 11 above.)

(*Ep. Carnat.*, Vol. VII, Shikarpur Taluq, no. 197, Transl., p. 124, para. 1, last seven lines ; Roman Text, p. 214, line 27 f.)

GRĀMA-GARBHA (*see* under GARBHA-NYĀSA)—The foundation of a village.

GRĀMA-MĀRGA—The village-road (*see* details under GRĀMA).

Viṁśad-dhanur grāma-mārgaḥ simā-mārgo daśaiva tu ।

(*Brahmāṇḍa-Purāṇa*, Part 1, 2nd anushaṁga-pāda, Chap. VII, v. 112.)

See further details under GRĀMA and NAGARA.

GRĀMA-LAKSHAṆA—The description of the village.

(*M.*, IX ; *see* under GRĀMA.)

GRĀMA-VINYĀSA (*see* GRĀMA)—The arrangement of laying-out of the village.

GRĀHA—A crocodile, a shark, an architectural and sculptural ornament.

A kind of mukha-bhadra or front porch, hall, or tabernacle.

(*M.*, XVIII, 302, etc.)

An ornament of the arch :

Grāha-kinnara-saṁyuktam ।
Grāha-kinnara-bhūshitam ।
Grāha-puchchhādi-sarveshāṁ svarṇa-ratnena bandhayet ।
Grāhāntaṁ sarva-ratnaiś cha puritaṁ śreṇi-saṁyutam ।

(*M.*, XLVI, 53, 56, 57, 60.)

GRĀHA-KUṆḌALA—The crocodile-shaped ear-ring for an image.

Cf. Grāha-kuṇḍala-bhūshaṇam ।—(*M.*, LIV, 8.)

Anyathā sarva-śaktīnāṁ grāha-kuṇḍala-bhūshiṇīm ।—(*M.*, LIV, 168.)

GRĪVA (*see* KAṆṬHA)—The neck, the dado ; as a member of the pillar it comprises vedikā (altar), grīva (dado proper), and bhūshaṇa (ornament).—(*M.*, XV, 105-107)

GRĪVA-BHŪSHAṆA—The ornament of the neck, a part of the pillar. It comprises uttara (fillet), vājana (fillet), gala (dado), and vājana (fillet).—(*M.*, XV, 111-113.)

GRAIVEYAKA—A necklace for an image.

Sapta-suvarṇṇa-nishka-kalitaṁ graiveyakaṁ kāntimat—'charming necklace made of seven nishkas of gold.'—(Four Inscrip. at Śrīkurmam, no. D, line 6, *Ep. Ind.*, Vol. v, p. 37.)

GH

GHAṬA—A pot, jar, pitcher, same as kumbha of the column (*see* STAMBHA), the torus (*see* Gwilt, *Encycl.* fig. 870), a type of building, a carving on the door.

Cf. Stambhaṁ vibhajya navadhā vahanaṁ bhāgo ghaṭo'sya bhāgo'nyaḥ ।

(*Bṛihat-Saṁhitā*, LIII, 29.)

Dr. Kern's rendering by 'base' seems rather doubtful.—(*J.R.A.S.*, N.S., Vol. VI, p. 285.)

(1) A type of building which is shaped like a water jar (kalaśa) and is 8 cubits wide.—(*Bṛihat-Saṁhitā*, LVI, 26, *J.R.A.S.*, N.S., Vol. VI, p. 319, *see* under PRĀSĀDA.)

A jar-shaped carving (on the doorframe) :

Śeshaṁ maṅgalya-vihagaiḥ śrī-vṛiksha-svastika-ghaṭaiḥ ।
Mithunaiḥ patra-vallībhiḥ pramathaiś chopaśobhayet ॥

(*Ibid.*, LVI, 15.)

A type of building :

(2) *Matsya-Purāṇa* (Chap. CCLXIX, vv. 37, 49, 53 ; *see* under PRĀSĀDA.)

(3) *Bhavishya-Purāṇa* (Chap. CXXX, v. 33 ; *see* under PRĀSĀDA.)

(4) *Mānasāra* (XLII, 15–18) :

Shaṭ-saptāshṭāṅgulaṁ vāpi śilā-stambhaṁ viśālakam ।
Vṛittaṁ vā chatur-aśraṁ vā ashṭāśraṁ shoḍaśāśrakam ।
Pāda-tuṅge'shṭa-bhāge tu triṁśenordhvam alaṅkṛitam ।
Bodhikaṁ mushṭi-bandhaṁ cha phalakā-tāṭikā-ghaṭam ।

(*See* further context under ŚILĀ-ŚTAMBHA.)

GHAṬṬA (*see* SOPĀNA)—A flight of steps.

Śrī-vat-a-rāja-ghaṭṭo'yaṁ nūnaṁ tenātra kāritaḥ ।
Brahmāṇḍam ujjvalaṁ kīrttim ārohayitum ātmanaḥ ॥

'He indeed caused this flight of steps to be built here, of the illustrious Vatsa-rāja, in order to make his bright fame ascend up into the universe.'

(Chandella Inscrip. no. B, Deogaḍh Rock Inscrip. of Kirtivarman, v. 7, *Ind. Ant.*, Vol. XVIII, pp. 238, 239.)

Cf. 'Ghāt—(1) A flight of steps leading to water, (2) a mountain pass, (3) a ferry.'

[Vincent Smith's *Gloss.* (*loc. cit.*) to Cunningham's *Arch. Surv. Reports.*]

GHAṬ'IKĀLAYA—The building where the water-clock is placed.

(Cintra Prasasti of the reign of *Sarangadeva*, v. 40, *Ep. Ind.*, Vol. I, pp. 284, 276.)

GHAṬIKĀ-STHĀNA—The place or building where a clock is placed, a religious centre, an institution, a hermitage, a temple.

(1) Uṭṭaṅkoktyā sāma-vede vyādhattaṁ ghaṭikāśramam—'in accordance with Uṭṭaṅka's saying in the *Sāma-veda*, the *ghaṭikā* (hermitage) was established.' (It should be noted that this inscription is on the door of the Ammanavaragudi in the enclosure of the same Janārdana-svāmi temple.)

(*Ep. Carnat.*, Vol. V, Part I, Chamunaraya-patna Taluq, no. 178, Roman Text, p. 462, Transl., p. 202.)

(2) 'Possessor of thirty-two velama, eighteen cities, sixty-four yoga-pīṭhas, and sixty-four *ghaṭikā-sthānas*(?).'—(*Ep. Carnat.*, Vol. VI, Shikārpur Taluq, no. 94 ; Transl., p. 61, line 6 f., Roman Test, p. 114, line 4 f.)

(3) 'He set out for the city of the Pallava Kings, together with his guru Vīraśarmmā, desiring to be proficient in pravachana, entered

into all *religious centres* (ghaṭikā-sthāna) and (so) became a quick (or ready) debator (or deputant).'—(*Ep. Carnat.*, Vol. v, Part I, Chamunaraya-patna Taluq, no. 176, Transl., p. 113, para. last, but one.)

(4) ' With myriads of people, practices of virtue, agreeable occupations, streams of the (nine) sentiments, pleasure-gardens, separated lovers, splendid tanks, full lotus beds, gilded boats for spring festivals, *ghaṭika-sthānas*(?), the supports of dharmma and mines of enjoyment . . . did the Kuntala-deśa shine.'—(*Ibid.*, no. 197, Transl., p. 127, first para. last seven lines ; Roman Text, p. 214, line 30.)

(5) Mr. Rice is not certain about the accurate meaning of the term. He refers to quotations nos. 1, 2, 3, 4, and seems to think that it means some kind of institution. He says that Mr. Pathak has translated it as ' religious centre ' (*Ind. Ant.*, XIV 34). Dr. Kielhorn has published an article on the subject (Gottingen Nachrichten for 1900, Heft 3) with special reference to the use of the word in this inscription (quotation no. 3 above) and gives quotations in support of his view that it means something like *brahma-puri*.' It is to be noted that Mr. Rice's reference to *Ind. Ant.* is not accurate, *see* below.

(*Ep. Carnat.*, Vol. VII, Introduct., p. 8, note 2.)

(6) Dvā-trimśat tu velāvuramum ashṭādaśa-paṭṭaṇamuṁ bāsa shaṭi-yoga-piṭhamum aruvattanalku-ghaṭika-sthānamum —(the people of the) ' thirty-two seaside towns, the 18 towns, 62 seats of contemplation, and 64 *religious centres* ' (together with . . . held a convocation there).

(Old Kanarese Inscrip. at Terdāl, line 60
Ind. Ant., Vol. XIV, pp. 19, 25.

GHANA—Solid, a kind of measurement, thickness.

Eka-hasta-samaṁ dīrghaṁ tad-ekāṅgula-vistṛitam ।
Ghanam ardhāṅgulaṁ proktaṁ hasta-niśchitya yojayet ।

(*M.*, II, 64–65 ; *see also* XXXIII, 311–313, 593–595, LX, 17–18 ; LXII, 17, under AGHANA.)

GHANA-MĀNA (*see* AGHANA-MĀNA)—The measurement by the exterior of a structure.

(*M.*, XXXIII, 291–330, and 331–335 , *see* under AGHANA-MĀNA.)

Cf. Yogādi-ghana-mānaṁ cha kṛitvā bāhye navāṁśakam ।

(*M.*, XXXIX, 64.)

GHĀṬ (-ṬA) (*cf.* TĪRTHA)—A landing, a flight of steps leading to water, a mountain pass, a ferry.

(*See* Vincent Smith's *Gloss.* to Cunningham's *Arch. Surv. Reports*, *loc. cit.*)

GHĀṬANA—A bolt.

Yogyaṁ kavāṭa-yugmaṁ śreshṭhaṁ madhyaṁ cha harmyake ।
Antar vāpi bahir vāpi ghāṭanaṁ kīla-saṁyutam ।

(*M.*, XIX, 152–153.)

GHṚITA-VĀRI (*cf.* PĪṬHA)—The water-pot, a part of the Pīṭha or the pedestal of the Phallus.

Pīṭhasyordhve viśāle tu chatushṭa-pañcha-shaḍ-aṁśake ।
Ekāṁśena cha śeshaṁ tu ghṛita-vāri-viśālakam ।

(*M.*, LIII, 24–52.)

CH

CHAKRA—The disc of Vishṇu, a type of buildings.

(*See Mānasāra* LXV, 145 ; LIV, 147 ; XXXII, 125, etc.)

A class of octangular buildings :

(1) *Agni-Purāṇa* (Chap. XLVII, vv. 20–21 ; *see* under PRĀSĀDA).

(2) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 21, 23, 31–32 ; *see* under PRĀSĀDA).

In connexion with the foundations :

Madhye chakraṁ tu bhaumena bhājanāntaṁ vinikshipet ।

(*M.*, XII, 137 ; *see also* 158.)

CHAKRA-KĀNTA—A class of the eleven-storeyed buildings.

(*M.*, XXXIX, 11–15 ; *see* under PRĀSĀDA.)

CHAṆḌITA—A type of storeyed building, a site-plan.

A class of the nine-storeyed buildings (*M.*, XXVII, 11–12 ; *see* under PRĀSĀDA).

A site-plan in which the whole area is divided into 64 equal squares (*M.*, VII, 9, *see*, for details, 77–110, *cf.* also VIII, 39 ; IX, 166, in connexion with the village ; XV, 390, etc.).

CHATUR-AŚRA (*see* CHATUSHKOṆA)—A type of building which is quadrangular in plan, has one storey and five cupolas.

(1) *Bṛihat-Saṁhitā* (LVI, 28, *and Kāśyapa*, *J.R.A.S.*, N. S., Vol. VI, p. 320, note 1).

(2) *Matsya-Purāṇa* (Chap. CCLXIX, vv. 28, 53 ; *see* under PRĀSĀDA).

(3) *Bhavishya-Purāṇa* (Chap. CXXX, v. 25 ; *see* under PRĀSĀDA).

CHATUR-MUKHA (*see* under GRĀMA and ŚĀLĀ)—Literally four-faced, a class of villages, a type of building, a kind of hall.

A class of the four-storeyed buildings (*M.*, XXII, 12–23 ; *see* under PRĀSĀDA).

A class of villages (*M.*, IX, 3, *cf.* the description in detail, 490–507 ; *see also* XIX, 212).

A class of śālāś (hall, mansion, pavilion, etc. *M.*, XXXV, 3–4 ; *see* under ŚĀLĀ).

Cf. Sarvatobhadra-chatur-mukha-ratna-traya-rūpa-tri-bhuvana tilaka-Jina-chaityālayavanu—' the Tribhuvana-tilaka-Jina-chaityālaya (temple, which is) auspicious on every side (sarvatobhadra), has four faces (chaturmukha), and is the embodiment of the three jewels.'

' The temple has four doors each of which opens on three identical stone images of the Tirthaṁkaras Ara, Malli and Munisuvrata.'

(Karkala Inscrip. of Bhairava II, line 17, *Ep. Ind.*, Vol. VIII, pp. 132, 135, notes 11, 12, and p. 134, note 3.)

CHATUR-VARGA—A set of four mouldings of the door, consisting of vedikā (platform), pāda (pillar), śiraḥ (spire) and śikhā (finial).

(*M.*, XXXIX, 154–156, *see also* XXXIII, 591.)

CHATUR-VARGA-KĀNTAKA—A set of four architectural members.

(*M.*, XXXIII, 531.)

CHATUSH-KOṆA—Literally four-cornered, a type of quadrangular buildings (*see* under CHATUR-AŚRA).

(1) *Bhavishya-Purāṇa* (Chap. CXXX, v. 25 ; *see* under PRĀSĀDA).

(2) *Bṛihat-Saṁhitā* (Chap. LVI, 18, 28 ; *see* under PRĀSĀDA).

CHATUḤ-ŚĀLĀ—A house with four śālās (rooms or halls), an open or closed quadrangle surrounded by buildings on all four sides, an enclosed courtyard, a mansion with four rows of buildings.

(*M.*, XXXV, 35.)

Evaṁ chatur-gṛihaṁ proktaṁ śālāyāṁ kalpayen na vā ||
Chatuś-śālā-pradeśe tu tad-adho-bhūmir uchyate ||
Madhya-maṇḍapa-saṁyuktaṁ chatur-gṛiham udāhṛitam ||

(*Kāmikāgama*, XXXV, 5–7, 70, 93.)

Chatuḥ-śāla-gra(gṛi) haṁ śreshṭhaṁ tri-śālaṁ madhyamaṁ bhavet |
Dvi-śālam adhamaṁ proktaṁ hīnaṁ syād eka-śālakam ||

(*Ibid.*, XXV, 13, 14.)

Śālaikā daṇḍa khaṇḍābhā dvi-śālā tad-dvayena tu |
Tat-trayena tri-śālā syāt chatuḥ-śālā chatushṭayī ||
Saptabhiḥ sapta-śālā syād evam anyaṁ tu kīrtitaḥ(-m) ||

(*Ibid.*, XXXV, 34, 35.)

Shaḍ-bhāgena mahā-śālā chatuḥ-śālā tri-bhāgikām ।
Madhya-śāla (-ir) yugāṁśena bhadra-śālā cha madhyame ।
Anuśālā cha madhye cha chaika-bhāgena bhadrakam ।

(*M.*, XXVI, 17-19.)

Chatuḥ-śālam—(*Amarakōsha*, II, ii, 6).

CHATUḤ-ŚILĀ—Literally four pieces of stone, a pedestal.

Benasyaika(-kā)-śilā proktaṁ liṅgānāṁ tach-chatuḥ-śilā ।

(*M.*, LII, 177.)

CHATUḤ-STALA—The fourth storey, its general description (*M.*, XII, 89 106), the eight classes (*ibid.*, 1–88).

(*See* under PRĀSĀDA.)

CHANDRA-KĀNTA—A site-plan in which the whole area is divided into 1,024 equal squares (*M.*, VII, 50 ; *see* under PADAVINYĀSA), a class of ten-storeyed buildings (*M.*, XXVIII, 6-8 ; *see* under PRĀSĀDA), one of the five Indian orders (*Suprabhedāgama*, XXXI, 65, 66 ; *see* under STAMBHA).

CHANDRA-ŚĀLĀ (-LIKĀ)—A room at the top of a house, a kind of windows, sky-lights, dormer-windows.

(1) Tri-chandra-śālā bhaved valabhī—the roof must have three dormer-windows.—(*Bṛihat-Saṁhitā*, LVI, 25, 27, *J.R.A.S.*, N. S., Vol. VI, pp. 319, 320.)

(2) Pārśvayoś chandra-śāle'sya uchchhrāyo bhumikā-dvayam ।

(*Matsya-Purāṇa*, Chap. CCLXIX, v. 38 ; *see also* vv. 40, 41, 42, 46.)

(3) Chandra-śālānvitā kāryyā bherī-śikhara-saṁyutā ॥

(*Garuḍa-Purāṇa*, Chap. XLVII, v. 44.)

(4) Tri-chandra-śālā bhaved valabhī ॥
Babu-ruchira-chandra-śālāḥ shaḍ-viṁśad-bhāga-bhūmiś cha ।

(*Bhavishya-Purāṇa*, Chap. CXXX, vv. 32, 34.)

(5) Hasti-prishṭha-yuktaṁ chandra-śālābhiś cha samanvitam (vimānam) ॥

(*Kāmikāgama*, L, 92.)

(6) Kuṭṭimo'strī nibaddhā bhūś chandra-śālā śirogṛiham ।
Commentary : chandrādi-dvayaṁ gṛihoparitana-gṛihasya uparam ādi-aṭṭāl ityādi prasiddasya ।

(*Amarakōsha*, II, 5, 8.)

CHARAṆA—A synonym of the pillar (*M.*, XV, 4), a foot (*M.*, LVIII, 3, etc.).

(*See* under STAMBHA.)

CHARA-VĀSTU—A movable structure, a temporary building.

Grāmādīnāṁ nagarādīnāṁ pura-pattana-kharvaṭe ।
Koshṭha-kolādi-sarveshāṁ garbha-sthānam ihochyate ।
Sthira-vāstu-kukshi-deśe tu chara-vāstu tathāpi cha ।

(*M.*, XII, 168–170.)

CHARUKA (*see* RUCHAKA)—A type of building.

Nispaṭaṁ charukaṁ vidyāt sarvatraiva viśeshataḥ ।

(*Kāmikāgama*, XXXV, 91 ; *see also* 88–90, under NANDYĀVARTA.)

CHALA-DAṆḌA—The movable lamp-post.

Chatur-aśraṁ vā tad ashṭāgraṁ vṛittaṁ vā chala-daṇḍakam ।
Sthira-daṇḍa-viśāle tu mānāṅgula-vaśān nayet ।

(*M.*, L, 84–85.)

CHALA-SOPĀNA—The movable staircase, a ladder.

(*M.*, XXX, 130 ; *see* under SOPĀNA.)

CHĀRA—A platform.

Vṛishabhasya lakshaṇaṁ samyag vakshyate'dhunā ।
Vimāne maṇḍape vāpi chāropari parinyaset ।

(*M.*, LXII, 1, 3.)

CHĀRU-BANDHA—A type of base of the pillar.

Tato jāṅgala-bhumiś ched adhishṭhānaṁ prakalpayet ।
Tach chātur-vidham ākhyātam iha śāstre viśeshataḥ ॥
Padma-bandhaṁ chāru-bandhaṁ pāda-bandham pratikramam ॥

(*Suprabhedāgama*, XXXI, 16–17.)

CHĀRYĀ—A road which is 8 cubits broad.

Ashṭa-hasta-pramāṇa-mārgaḥ ।

(*See Kauṭilīya-Artha-śāstra*, under PATHA.)

CHITRA—An image, a painting, a marble, glass, high or full relief.

A painting (*M.*, XXXV, 402, etc.).

A kind of marble or glass (*M.*, LVI, 15, etc.).

A kind of octangular building (*Agni-Purāṇa*, Chap. CIV vv. 20–21 ; *see* under PRĀSĀDA).

A full relief or image whose whole body is fully shown :

Sarvāṅgaṁ dṛiśyamānaṁ yat chitram evaṁ prakathyate ।

(*M.*, L, 1–9.)

See Suprabhedāgama (XXXIV, 3) under ĀBHĀSA.

CHITRA-KALPA—A head-gear, an ornament for an image.

Patra-kalpaṁ chitra-kalpaṁ ratna-ka'paṁ cha miśritam ।
Eshāṁ chatur-vidhaṁ proktaṁ kuryād ābharaṇaṁ budhaḥ ।

(*M.*, L, 3-4.)

CHITRA-KARṆA—A kind of pillar.

(*M.*, XV, 30 ; *see* under STAMBHA.)

CHITRA-TORAṆA (*see* TORAṆA)—A type of arches, an ornamental arch employed in gods' temples and kings' palaces as well as in their thrones, decorated with the images of demi-gods, demons, lions, leographs, and geese.

Tad eva (like the Makara-toraṇa) pārśvayor madhyaṁ pūritaṁ cha dvayor (makarayor) api ।
Nakra-tuṇḍa-prāg-grahaiś cha tayor āsya-vinirgataiḥ ॥
Vidyādharaiś cha bhūtaiś cha siṁhe(-hairi)va vyāla-haṁsakair api ।
Bāle srag-daṇḍakair anyair maṇi-bandhair vichitritam ॥
Chitra-toraṇaṁ etat syād devānāṁ bhū-bhṛitāṁ varam ।
Ihāsu pratimādyāsu pādāḥ sarvāṅga-śobhitāḥ ॥
Chatur-asrāshṭa-vṛittābhā kumbha-maṇḍyā saṁyutāḥ ।
Pottikā-sahitā vā syur viyuktā vā prakīrtitāḥ ॥
Utsandhād avalambaṁ tu kuryān makara-pṛishṭhakam ॥

(*Kāmikāgama*, LV, 66-70.)

CHITRA-PAṬṬA—A moulding of the pillar, an ornamented band.

(*M.*, XV, 34 ; *see* the lists of mouldings under ADHISHṬHĀNA and UPAPĪṬHA.)

CHITRA-SKAMBHA—A column with all characteristics of the padma-kānta (*see* below) except the āsana (seat).

(*M.*, XV, 39 ; *see* under STAMBHA.)

CHITRĀGĀRA—A picture gallery.

(Rhys David's *Buddhist Sutta*, p. 68.)

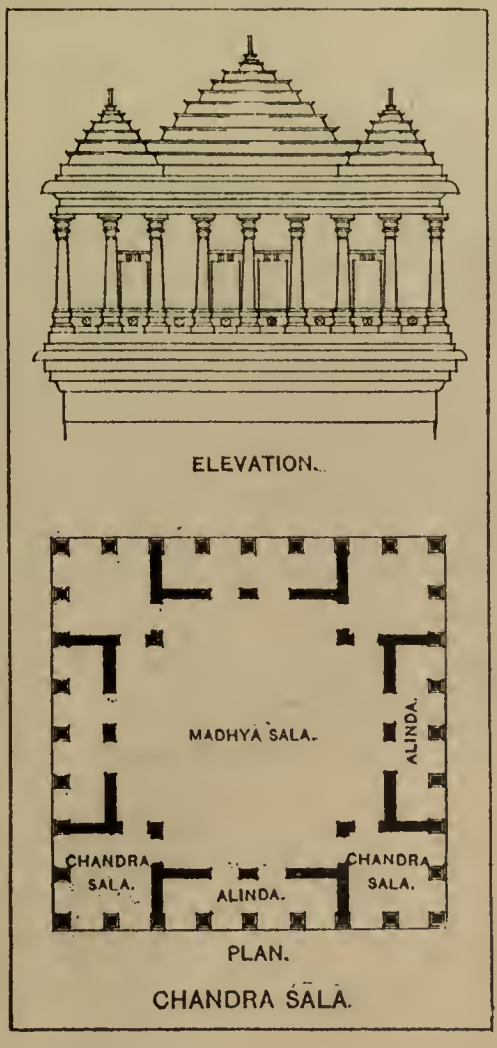
CHITRĀBHĀSA (*see* ĀBHĀSA)—A kind of marble, glass, an image.

(*M.*, LVI, 15 ; *see* under ĀBHĀSA.)

Śilodhavānāṁ vi(bi)mbānāṁ chitrābhāsasya vā punaḥ ।
Jalādhivāsanaṁ proktaṁ vṛishendrasya prakīrtitam ॥

(*Liṅga-Purāṇa*, Part II, Uttara-bhāga, Chap. XLVIII, v. 43.)

An image painted on a paṭa (a piece of cloth, a tablet, a plate) or wall (*Suprabhedāgama*, XXXIV, 4 ; *see* under ĀBHĀSA).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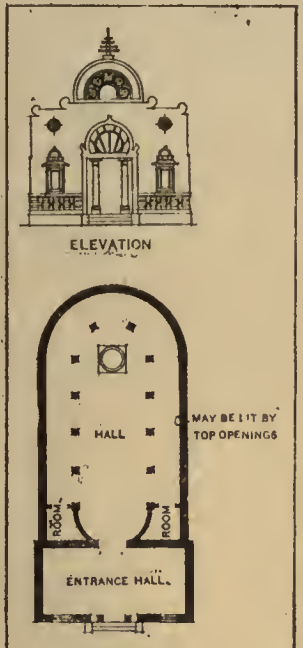
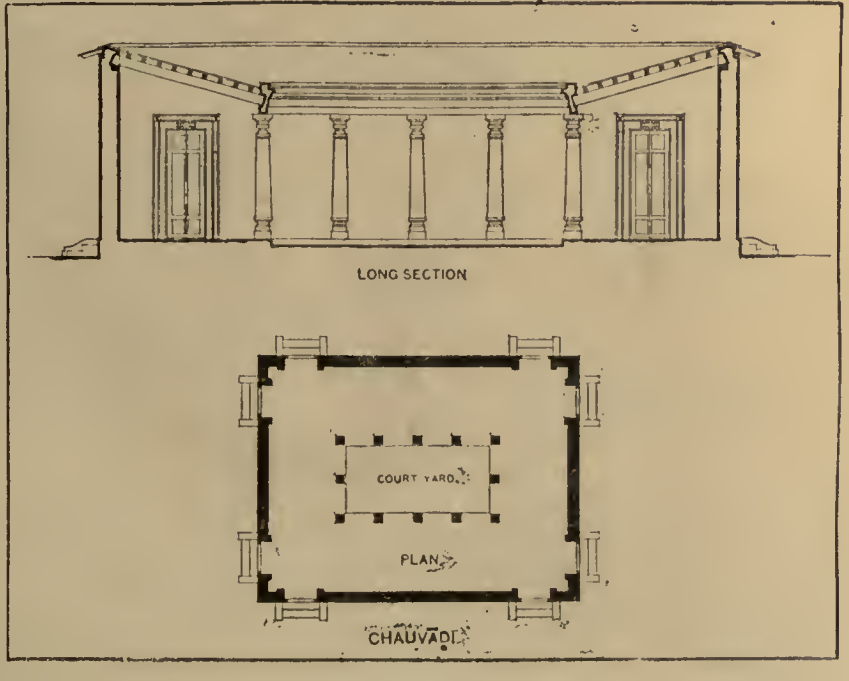
MADHYA SALA.
ALINDA.
CHANDRA SALA.
ALINDA.
CHANDRA SALA.
PLAN.
CHANDRA SALA.

CHITRA-TORANA


ELEVATION
HALL
MAY BE LIT BY TOP OPENINGS
ROOM
ROOM
ENTRANCE HALL.
PLAN.
CHAITYA.


LONG SECTION
COURT YARD.
PLAN.
CHAUVADI.

CHITRĀRDHA—A half relief or an image half of whose body is shown.

(*Suprabhedāgama*, XXXIV, 4, *see* under ĀBHĀSA.)

CHULLĪ—A building lacking a southern hall, an apartment of three divisions, one looking north, another east, and the third west.

Yāmyā-hīnaṁ chullī tri-śālakaṁ vitta-nāśa-karam etat ।

(*Bṛihat-Saṁhitā*, LIII, 38, *J. R. A. S.*, N. S., Vol. VI, p. 282.)

CHŪLIKĀ (CHŪLĪ)—A tower, a head ornament, the capital, the top.

(1) Antar vapra(ḥ) bahir bhittiś cheshṭaṁ dīrghaṁ cha chūlikā ।

(*M.*, IX, 362.)

In connexion with the joinery :

Etat suvṛitta-pādānāṁ tri-karṇaṁ vakshyate'dhunā ।
Tad eva cha tri-karṇaṁ syāt tri-chūlikam eva cha ।

(*M.*, XVII, 104–105.)

In connexion with the gopura or gate-house.—(*M.*, XXXIII, 313.)

In connexion with the maṇḍapa (pavilion) :

Tad (prastara)-ūrdhve maṇḍapānāṁ cha chūlikā-karṇa-harmyakam ।

(*M.*, XXXIV, 4.)

An ornament for the head :

Lamba-hāram api chūlikādibhiḥ । (*M.*, L, 301.

(2) Stambhasya parikshepāsh shaḍ-āyāmā dvi-guṇo nikhātaḥ chūlikāyāś chatur-bhāgaḥ— ' in fixing a pillar 6 parts are to form its height on the floor, twice as much (12 parts) to be entered into the ground, and one-fourth for its *capital*.'—(*Kauṭilīya-Artha-śastra*, Chap. XXIV p. 53.)

(3) Trichūlī vaiśya-śūdrāṇāṁ pañcha sapta mahībhṛitām ।
Brāhmaṇānāṁ tathaiva syur ekādaśa tu vedikāḥ ॥
Pāshaṇḍāśraminām yugma-saṁkhyā chūlī vidhīyate ॥

(*Kāmikāgama*, XXXV, 160, 161.)

The synonyms of chūlikā :

St(h)ūpikā cha ghaṭaḥ kīlo śūlakaḥ st(h)ūpir ity-api ।
Śikhā st(h)ūpir iti khyātā chūlikā cha dvijottamāḥ ॥

(*Ibid.*, LV, 207.)

CHŪLI-HARMYA (*cf.* CHULLĪ)—A tower, a room at the top of a house, an attic room, the garret.

(1) Prastarordhve viśesho'sti chūli-harmyādi-maṇḍitam ।

(*M*, XXXIV, 499.)

(2) Ekāneka-talāntaṁ syāt chūli-harmyādi-maṇḍitam ।

(*M.*, xxxv, 37, etc.)

(3) Chūli-harmya-yutaṁ chorddhve chāgra-dvāra-śamanvitam ॥
Sorddhva-vāstavya-saṁyuktaṁ chūliharmya-yutaṁ tu vā ॥
Sā bhūmir maṇḍapāgāra-chūli-harmya-vibhūshitā ॥
Athavā maṇḍaporddhve tu chūli-harmya-vibhūshitam ।
Talādhiṣṭhāna-pādebhyaḥ kiṁchid-ūna-pramāṇakam ॥

(*Kāmikāgama*, xxxv, 63, 65, 71, 114.)

(4) Prākāra-madhye kṛitvā vāpīṁ pushkariṇīṁ dvāraṁ chatuś-śālam adhyardhāntarāṇikaṁ kumārī-puraṁ muṇḍa-harmyaṁ dvi-talaṁ muṇḍaka-dvāraṁ bhūmi-dravya-vaśena vā tri-bhāgādhikāyāmāḥ bhāṇḍa-vāhiniḥ kulyāḥ kārayet ।

'In the centre of the parapets, there shall be constructed a deep lotus pool; a rectangular building of four compartments, one within the other, an abode of the goddess Kumāri (?) having its external area 1½ times as broad as that of its innermost room; *a circular building with an archway*; and in accordance with available space and materials, there shall also be constructed canals (?) to hold weapons and three times as long as broad.'

Pandit Shāma Śastri's translation, as given above, does not seem to have resulted from a happy construction of the text. 'Kumaripura,' '*muṇḍa-harmya*' and 'dvi-tala' (two-storeyed) 'muṇḍaka-dvāra' bear apparently some technical meanings which are not well expressed in the translation.

'Muṇḍa-harmya' might be identical with 'chūli-harmya' inasmuch as 'muṇḍa' and 'chūli' are almost synonyms, both meaning top or summit (*see* KUMĀRĪ-PURA).

(*Kauṭilīya-Artha-śastra*, Chap. xxiv, p. 54.)

CHAITYA (CHAITYĀLAYA)—Primarily a heap or tumulus, implies also a place of sacrifice or religious worship, an altar, derived from 'chitā', a heap, an assemblage, etc.; a monumental tomb, a sanctuary, a monastery, a shrine, a temple, the church-like Buddhist assembly halls. 'All structures of the nature of sanctuaries are chaityas, so that sacred trees, statues, religious inscriptions and sacred places come also under this general name.'

(1) Tasminn Iruga-daṇḍeśa-pure chāru-śilāmayam ।
Śri-Kuṁthu-Jinanāthasya chaityālayam achīkarat ॥

'In this city the general Iruga caused to be built of fine stones a temple (chaityālaya) of the blessed Kunthu, the Lord of Jinas.'

(Vijayanagara Inscrip. of Harihara, ii, v. 28, *H.S.I.I.*, Vol. i, no. 152, pp. 158, 160.)

(2) Pārśvanāthasya Arhataḥ śilāmayaṁ chaityālayam achīkarat।

'Caused a temple (chaityālaya) of stone to be built to the Arhat Pārśvanātha.'

Cf. Bhavya-paritosha-hetuṁ śilāmayaṁ setum akhiladharmmasya।
Chaityāgāram achīkarad ādharaṇī-dyumaṇi-hima-kara-sthairyyam ॥

(Vijayanagara Inscrip. of Devaraja II, v. 20, *H.S.I.I.*, no. 153, pp. 162, 164, 166.)

(3) Śrī-yogasvāminaḥ. . . . eshā Malukaya-chaityā—'this is the Malukaya temple of the god Yoga Svāmin.'—(Sanskrit and old Kanarese Inscrip. no. 170, Asni Inscrip. of Mahipala, line 7 f.; *Ind. Ant.*, Vol. xvi; p. 175, note 12.)

(4) Abode chātiyaṁ—'The chaitya on (Mount) Arbuda.'

Miga-sakadakaṁ chetaya—'The chaitya which gladdens the antelopes.'—(Bharaut Inscrip. nos. 5, 11, *Ind. Ant.*, Vol. xxi, pp. 227, 228.)

(5) 'Kāyastha Palhadeva (or Palhaja) . . . built a tank and a temple (chaitya) of Śambhu (Śiva), and also laid out a garden.'—(Narawar Stone Inscrip. of Ganapati of Nalapura, vv. 22-25, *Ind. Ant.*, Vol. xxii, p. 81.)

(6) 'Veśāli is beautiful and beautiful are the Udena, Gotamaka, Sattambaka, Bahuputta, Sārandada, and Chāpāla chetiyas.' (*Digha-Nikāya*, ii, p. 102, *Udana*, vi, 1.)

'In speaking of these shrines we are not to think of the venerated trees only, apart from some structure of art and architecture, an enclosed terrace at the foot, and, in some instances, a temple near by, the trees themselves standing as natural landmarks of the sacred sites.'—(Barua, *J.I.R.I.*, p. 126.)

(7) Boppaṇāpara-nāmāṅkaś chaityālayam achīkarat—'he, having another name Boppana, had the Jaina temple made.'—(*Ep. Carnat.*, Vol. ii, no. 66; Roman Text, p. 60; Transl., p. 149.)

(8) 'They caused to be erected the lofty chaityālaya called Trijagan-maṅgalam, and set up (the god) Māṇikya-deva; also caused to be rapaired the Parameśvara-chaityālaya which the blessed ones (Jains) had formerly erected in Hullanahaḷḷi and granted lands to privide for the offerings at the two chaityālayas.'—(*Ep. Carnat.*, Vol. iii, Nanjangūd Taluq, no. 64; Transl., pp. 101, 102; Roman Text, p. 193.)

(9) 'Caused to be set up afresh the image of the Tīrtha(ṅ)-kara Chandraprabha, the god Vijaya and the goddess Jvālinī, in the chaityālaya at Kelasūr, which he had caused to be repaired and painted anew.'—*Ep. Carnat.*, Vol. iv, Gunḍlupet Taluq, no. 18; Transl., p. 38.)

(10) Aneka-ratna-khachita-ruchira-maṇi-kalaśa-kalita-kūṭa-koṭi-ghaṭitam apy-uttuṅga-chaityālayamaṁ—'having erected . . . a lofty chaityālaya,

with kalaśas or towers surmounted by rounded pinnacles set with all manner of jewels.'—(*Ep. Carnat.*, Vol. VI, Muḍgere Taluq, no. 22 ; Roman Text, p. 148, line 12 ; Transl., p. 63, para. 2.)

(11) ' Chaityas or assembly halls—These in Buddhist art correspond in every respect with the churches of the Christian religion. Their plans, the position of the altar or relic-casket, the aisles and other peculiarities are the same in both, and their uses are identical in so far as the ritual forms of the one religion resemble those of the other.'—(Fergusson, *Hist. of Ind. and East. Arch.*, pp. 50–51.)

For architectural details of the existing (Buddhist) chaitya-halls *see* Fergusson :

Plans of Chaity Hall at Sanchi (p. 105, fig. 41).

Lomas Rishi Cave (p. 109, figs. 43, 44).

Plan and Elevation of Chaitya Cave at Bhaja (pp 110–111, figs. 45–47.)

Plan of Cave at Nasik (p. 115, fig. 49).

Plan, section, elevation and views of Cave at Karle (pp. 117-118, 120, figs. 54, 53, 55, 56).

Cross Section and View of Caves at Ajunta (pp. 123–125, figs. 57, 58, 59 and 60).

Cave at Ellora (p. 128, fig. 63).

Plan of Cave at Dhumnar (p. 131, fig. 65).

(12) *See* Buddhist cave-temples (*Arch. Surv.*, New Imp. Series, Vol. IV, the chaitya-cave at Kondane, photo, facing the title page).

(13) ' The word, chaitya, is derived from the root, chin, chayane, to collect, and the commentary on Amara, called the Gurubālaprabodhikā, says that it denotes a building, because it is the result of the collection, or putting together of stones (chīyate pāshāṇādinā chaityam). But it will be seen that in some of the above quotations the word is used in close connexion with yūpa, the sacrificial post. The ceremony performed at the end of the great sacrifices is called chayana, i e., the collection of the sacred ashes and other relics and the grouping them into the form of a tortoise, or of the bird Garutmat as in the sacrifice called Garuḍa-chayana, chita being the scared things thus collected, it appears that the building constructed to preserve them for the purpose of worship was called chaitiya or chaitya.'

' This place of worship, from its connexion with Vedic rites, is probably of older date than the devāyatanas.'

' It is, therefore, clear that the *Rāmāyaṇa* alludes to the Brāhmaṇical and not to the Bauddha Chaitya. The commentators are not consistent in saying that chaitya means a Brāhmaṇical building

when it is mentioned in connexion with Rāma and his country, a Buddhist building when mentioned in connexion with the enemy's country, forgetting that Vālmiki has peopled Laṅkā with Vedic students and sacrificers without ever mentioning the Buddhists.'

'No. 7 (*Rāmāyaṇa*, v. 12, 17) mentions chaitya trees so called probably because instead of constructing a building it was also the custom to plant trees with revetment round their stems where the chayana ceremony was performed. In course of time, however, all revetted trees began to be called chaitya trees; and to such trees, which are generally found in all villages Kālidāsa evidently alludes when describing the Daśārṇa country in his *Meghadūta*. Mallinātha quotes Viśva (chaityam āyatane Buddhavandye choddeśapādape).'

'The ceremony performed after the burning of dead bodies is saṁchayana, in which, after collecting the bones, a portion of the ashes is grouped into a human form and baśāli or food offered to it. I take the smaśāna-chaitya alluded to in no. 9, to be a monumental building erected on such spot in memory of departed kings and other great personages.'

'It may, therefore, be presumed that in accordance with custom a chaitya was built in memory of Buddha, and that his disciples began to worship and multiply it by taking his funeral relics to different parts of the country while the sacrificial chaityas of the Brāhmaṇs became scarce owing to the opposition made by the Bauddhas to animal sacrifices, and the Brāhmans themselves having prohibted the aśvamedha for the Kaliyuga.'

'It will be seen that the *Rāmāyaṇa* mentions temples and idolatry; but these seem to be of old date in India, though not so very prevalent as at present. Stenzler's *Gautama Sūtra* (9, 66) prescribes the going round of Devāyatana; gṛiha-devatās or household gods are mentioned (in 5, 13).'

(*Ind. Ant.*, Vol. xi, pp. 21–22.)

(14) 'Properly speaking it is not temple (chaitya-gṛiha) but the dagaba inside it that is called a chaitya. In a secondary sense it is used by Jainas and Buddhists, however, to denote a temple containing a chaitya, and is also applied in Buddhist books to a sacred tree as well as to a stūpa.'

'Hence it is closely connected in meaning with stūpa. Chaityas were known before Buddha's time (*see J. As. Soc. Beng.*, Vol. vii, p. 1001, *cf* Alwis' *Buddhism*, pp. 22, 23).' Dr. Burgess.—(*Ibid.*, pp. 20, 21, notes 1, 2.)

CHAITYA-GṚIHA (*see* STŪPA-GṚIHA)—A dome-like construction in tope, supported by pillars.

(W. Geiger: *Mahāvaṁśa*, p. 295.)

CHERIKĀ (*cf.* PANDI-CHERI)—A village, a town, a fortified capital city on the hill top and on the banks of a river or sea, flourishing and well inhabited by people of Brāhman and other castes and containing royal residence and king's palace.

A suburb town inhabited by the weavers :

Grāmādīnāṁ samīpaṁ yat sthānaṁ kubjam iti smṛitam ॥
Tad eva cherikā proktā nagarī tantuvāya-bhuḥ ॥

(*Kāmikāgma*, xx, 15, 16.)

According to the *Mānasāra*, it is a prosperous capital city connected with rivers and hills, and well fortified :

Nadyādi-kānanopetaṁ bahu-tīra-janālayam ।
Rāja-mandira-saṁyuktaṁ skandhāvāra-samanvitam ।
Pārśve chānya-dvi-jātnīāṁ gṛihāntaś cherikoditaḥ ।

(*M.*, x, 85–88.)

CHAUCHĀLĀ(-VĀḌI)—A building with four sloping roofs.

'In the tiger-face chāvaḍi (i.e. chauvāḍi) he set up images of his family gods (named).'—(*Ep. Carnat.*, Vol. v, Part 1, Channarayapatna Taluq, no. 160 ; Transl., p. 196 ; Roman Text, p. 451.)

In East Bengal also the term is used in the same sense, but there is generally denotes straw-built houses.

CHH

CHHAT(-T)RA(-Ī) (*see* SATTRA)—Free quarters in connexion with temples, finial or spire of a building.

(Fergusson, *Hist. of Indian Architecture*, Vol. 1, p. 279.)

(1) *See* Inscriptions from Northern Gujarat (no. XVII, line 6, and no. XIX, line 6, *Ep. Ind.*, Vol, II, pp. 30, 31).

(2) 'And as a work of dharma, (I) wish to erect a chhatra in the presence of the god Vināyaka . . . and erecting a chhatra for daily feeding of six Brāhmans in the presence of the god Vināyaka.'—(*Ep. Carnat.*, Vol. x, Mulbagal Taluq, no. 259 ; Transl., p. 132.)

(3) 'And (he) presented the land to Amareśvara-tīrtha-Śrīpāda, for a chhatra (perhaps by slip Mr. Rice puts in chatra, because in the text, the reading is chhatra) in connexion with this maṭha, providing for 1 yati, 4 Brāhman pilgrims, and 2 cooks, altogether 7 persons, from the proceeds of cultivating the land.'

From this passage it is clear beyond doubt that 'chhatra' and 'sattra' point to the same object, namely, a building or buildings constructed in

connexion with a temple, maṭha, or chaityālaya to provide lodgings and food gratis to deserving persons.

(*Ep. Carnat.*, Vol. VI, Koppa Taluq, no. 27; Transl., p. 80, Roman Text, p. 274, para. 2, line 5 f.)

CHHANDA (*see* VIMĀNA-CHHANDA)—A building, a door, a phallus. The temple (prāsāda) named vimāna belonging to the chhanda class.

(*Bṛihat-Saṁhitā*, LVI, 17, 22.)

A class of buildings (*Kāmikāgama*, XLV, 20).

Karṇe śālā sabhā madhye chhandaṁ syāch chhandam eva tat ||

(*Ibid.*, L, 13 and 7.)

A type of kūṭa-koshṭha or top-room (*ibid.*, LV, 129, 123–127).

A class of buildings or top-rooms (*M.*, XI, 104–107; XIX, 1–5; XXX, 175–177; XXXIV, 549–552; *see* under ĀBHĀSA.)

A class of doors (*M.*, XXXIX, 28–35; *see* under ĀBHĀSA).

A type of the phallus (*M.*, LII, 49; *see* under ĀBHĀSA).

CHHANDA-PRĀKĀRA—The court or the enclosure of the chhanda-class of buildings.

(*M.*, XXXI, 24.)

CHHANNA-VĪRA—A sculptural ornament. It passes over shoulders and hips, crossing and fastening in the middle of the breasts and the back of an image.

(*See* Rao, *Elements of Hindu Iconography*, I, XXXI, M. F. A. Bulletin no. 152, p. 90, and Coomaraswamy *F. A. O. S.* 48, 3, p.255.)

Ūrdhva-kāye cha hārādi pārśvayor bāla-lambanam |
Madhye dāma cha lambaṁ syāch chhanna-vīram iti smṛitam ||

(*M.*, L,35–36.)

CHHELĀ (PHELĀ) (*see* GARBHA-MAÑJŪSHĀ)—The vault of the foundation-pit.

Hemākāreṇa tāmreṇa chhelāṁ vā kārayed budhaḥ ||
Chhelotsedhaṁ tri-pādāṁ syād apidhānasya samuchchhrayaḥ ||
Chhelā pañchāṅgulā proktā gṛihāṇāṁ nādhikā bhavet ||

Phelā is perhaps the same as 'chhelā'

Shaḍ-aṅgula(ṁ) pramāṇaṁ tu chatur-viṁśāṅgulāntakam |
Bhājanasya samantāt tu sāvakāsa-samanvitam ||
Tathāśmanā cheṣṭakayā phelākārāṁ tu garttakam ||

(*Kāmikāgama*, XXXI, named Garbha-nyāsa-vidhi, 6, 7, 12, 74, 75.)

J

JAGATA(-TĪ) (*cf.* JĀTI)—A moulding of the base, or of the pedestal of an idol or phallus, a class of buildings, platform over a well.

(1) Pīṭhikā-lakshaṇaṁ vakshye yathāvad anupūrvaśaḥ ॥
Pīṭhochchhrāyaṁ yathāvach cha bhāgān shoḍa'a kārayet ।
Bhūmāvekaḥ pravishṭaḥ syāch chaturbhir jagatī matā ॥
(*Matsya-Purāṇa*, Chap. CCLXII, vv. 1-2, *see also* 4-5.)

(2) Śikhareṇa samaṁ kāryam agre jagati(tī)-vistaram ।
Dvi-guṇenāpi karttavyaṁ yathā-śobhānurūpataḥ ॥
(*Agni-Purāṇa*, Chap. XLII, v. 5.)
Jagatī-vistarārddhena tri-bhāgena kvachid bhavet ॥
(*Ibid.*, Chap. CIV, v. 6.)

(3) Pravṛitā jagati kāryyā phala-pushpa-jalānvitā ॥
(*Garuḍa-Purāṇa*, Chap. XLVII, v. 47.)

(4) Pāda-bandha-vimāne tu geha-garbhopari nyaset ।
Pratibandha-vimāne tu vṛiter upari vinyaset ॥
Vṛiter upari viprāṇāṁ kumudopari bhūbhṛitam ।
Jagaty-upari vaiśyānāṁ śūdrāṇāṁ pādukopari ॥
(*Kāmikāgama*, XXX, 91, 92.)

(5) A moulding of the base (adhishṭhāna) :
Jagatī tu shaḍ-aṁśā syād dvi-bhāgārdha-dalī kramāt ॥
Shad-bhāgā agatī proktā kumudaṁ pañcha-bhāgikam ॥
(*Suprabhedāgama*, XXXI, 19, 24.)

(6) A class of buildings (*Ep. Ind.*, Vol. I, pp. 165, 277 ; *Ind. Ant.*, Vol. XIV, p. 161, note 22).

JAṄGAMA-(BERA)—The movable idol.

Sthāvaraṁ jaṅgamaṁ chaiva dvi-vidhaṁ beram uchyate ।
Jaṅgamaṁ chotsavaṁ bhavet sarvaṁ sthāvaram ishyate ।
(*M.*, LI, 17-18.)
Evaṁ tu chotsavādīnāṁ sthāvaraṁ jaṅgamādinaḥ(-nām) ।
(*M.*, LXIV, 93.)

JAṄGHĀ—The leg of an image, the pillar in a building, a column.

(1) A synonym of the pillar (*M.*, XV, 4; *see* under STAMBHA).
A pillar in an upper storey (*M.*, XXVI, 55 ; *see* under STAMBHA).
A part of the leg from the ankle to the knee :
Jānu-tāraṁ śarāṁśaṁ syāj jaṅghā-tāraṁ yugāṁśakam ।
(*M.*, LVII, 33, etc.)

(2) Jaṅghochchhrāyaṁ tu karttavyaṁ chatur-bhāgena chāyatam ।
Jaṅghāyāṁ(-yāḥ) dvi-guṇochchhrāyaṁ mañjaryyāḥ kalpayed budhaḥ ॥

(*Agni-Purāṇa*, Chap. v, 423.)

(3) Ūrddhva-kshetra-sama-jaṅghārddha-dvi-guṇaṁ bhavet ॥
Tad-dvidhā cha bhaved dhītir jaṅghā tad vistārārddhagā ॥
Tad-vistāra-samā jaṅghā sikharaṁ dvi-guṇaṁ bhavet ॥

(*Garuḍa-Purāṇa*, Chap. XLVII, vv. 3, 12, 17; *see also* v. 13.)

JAṄGHĀ-PATHA (*see* RĀJA-PATHA)—The footpath, a road, a street, a lane.

Jaṅghā-pathas chatush-pādas tri-pādas cha gṛihāntaram ।
Dhṛiti-mārgas tūrddhva-shashṭhaṁ kramaśaḥ padikaḥ smṛitaḥ ॥

(*Brahmāṇḍa-Purāṇa*, Part I, 2nd anushaṁga-pāda, Chap. VII, v, 115; *see also* vv. 113, 114 under RĀJA-PATHA.)

JAJÑA-KĀNTA—A class of the five-storeyed buildings.

(*M.*, XXIII, 41; *see* under PRĀSĀDA.)

JANAKA(JANA-KĀNTA)—A class of the eight-storeyed and of the twelve-storeyed buildings.

(*M.*, XXVI, 39; *see* under PRĀSĀDA.)

A class of the twelve-storeyed buildings once prevailing in the ancient country of Janaka (Mithilā):

Tad eva mahā-śālā tu dvi-bhāgaṁ madhya-bhadrakam ।
Jana-kāntam iti proktaṁ śrēshṭho ravi-tālānvitam ।

(*M.*, XXX, 35-36; *see also* 33-34, under MĀGADHA-KĀNTA.)

JANA-CHĀPĀKṚITI—A type of bow-shaped arch.

Vṛittaṁ vātha tri-yugmaṁ vā chārdha-chandrākṛitis tathā ।
Jana-chāpākṛitir vāpi yatheshṭākāra-toraṇam ।

(*M.*, XLVI, 31-32.)

JANMAN (*cf.* UPĀNA)—The base, the plinth, the basement.

The basement (*M.*, XI, 125, 126; XII, 202, etc.)

The plinth of the pedestal (*M.*, XIII, 5, etc., *see* the lists of mouldings under UPAPĪṬHA).

The plinth of the base (*M.*, XIV, 16, etc., *see* the lists of mouldings under ADHISHṬHĀNA.)

JANMA-NIRGAMA (-NISHKRAMAṆA)—The projection or extension of the base or basement.

(*M.*, XIII, 138; VI, 106, etc.)

JAYADA (*see* UTSEDHA)—A height which is 1½ of the breadth.

(*M.*, XXXV, 22, 26, and *Kāmikāgama*, L, 24 f., *see* under ADBHUTA.)

JAYANTA-PURA—A town, a village, an establishment for pious and learned Brāhmans.

(Kamauli Plates of the Kings of Kanauj, no. U, line 28, *Ep. Ind.*, Vol. IV, pp. 128, 129.)

JAYANTI(-Ī)—A column, a post, a moulding, a flag, a banner.

(1) A synonym of the balance-post (tulā-daṇḍa) :

Tula-daṇḍaṁ jayantī cha phalakā paryāya-vāchakāḥ ।

(*M.*, XVI, 48.)

(2) A part of the column :

Mudrikāch cha tulādhikyā jayantī tu tulopari ॥

(*Suprabhedāgama*, XXXI, 108 ; *see also* 105–109, under STAMBHA)

(3) A moulding of the column :

Tulā-vistāra-tārochchā jayantī syāt tulopari ॥
Jayantī vaṁśakā jñeyā tulāvad anumārgakam ॥

(*Kāmikāgama*, LIV, 13, 16.)

JAYANTIKA(-KĀ)—A post, a moulding, a flag, a banner, the parapet staff.

In connexion with the entablature (prastara) :

Etat prachchhādanāt sthāne daṇḍaṁ chopari śāyayet ।
Etad dvāra-vaśād dīrghaṁ tasyopari jayantikam ।
Dāru-daṇḍaṁ śilā vāpi ishṭakena jayantikam ।
Athavā dāru jayantiś cha śilā chet saha-daṇḍakam ।
Vinā deṇḍaṁ tathā kuryāt pāshāṇaṁ phalakā nyaset ।
Etat sarvālaye kuryād deva-harmye viśeshataḥ ।

(*M.*, XVI, 124-129.)

Ādhāra-paṭṭa-saṁyuktaṁ sa-tulaṁ tu jayantikam ।

(*Ibid.*, XVI, 149 ; *see M.*, XXXIII, 372–374.)

JAYA-BHADRA—A pavilion with twenty-two columns.

(*Suprabhedāgama*, XXXI, 102, 100 ; *see* under MAṆḌAPA.)

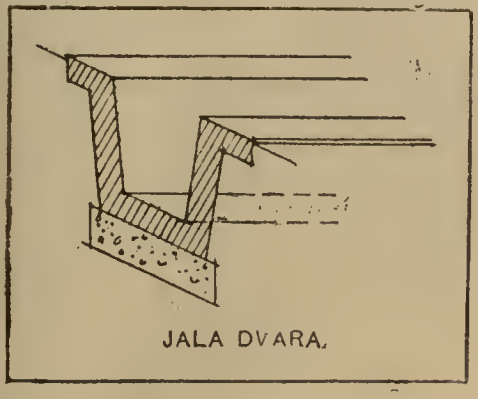
JAYA-STAMBHA—A pillar of victory (*see* under STAMBHA).

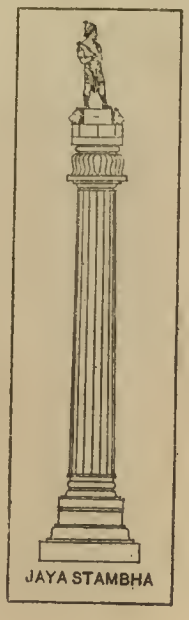
JAYĀLA—A type of pavilion.

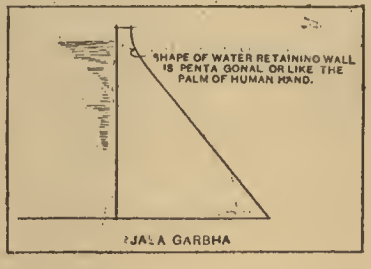
(*M.*, XXXIV, 294 ; *see* under MAṆḌAPA.)

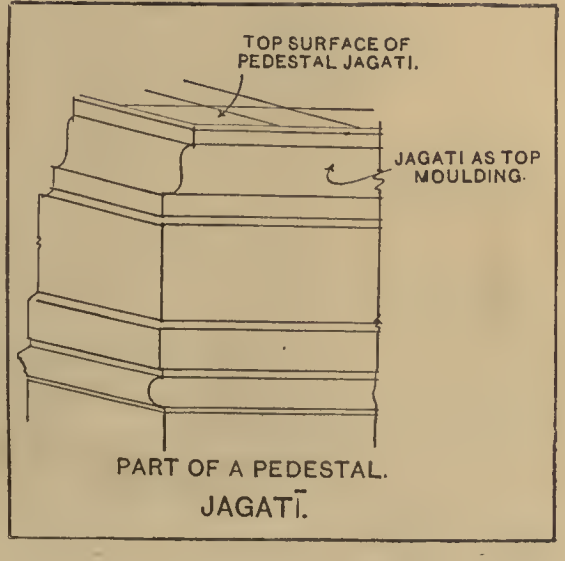
JAYĀVAHA—A pavilion with fifty pillars.

(*Matsya-Purāṇa*, Chap. CCLXX, v. 9 ; *see* under MAṆḌAPA.)


JALA DVARA.


JAYA STAMBHA


SHAPE OF WATER RETAINING WALL IS PENTA GONAL OR LIKE THE PALM OF HUMAN HAND.
JALA GARBHA


TOP SURFACE OF PEDESTAL JAGATI.
JAGATI AS TOP MOULDING.
PART OF A PEDESTAL.
JAGATI.

JALA-GARBHA (*see* GARBHA)—The water-foundations, the foundation of a tank, etc.

(*M.*, XII, 184–189 ; *see* under GARBHANYĀSA.)

JALA-DURGA (*see* under DURGA)—A water-fort.

(1) *Kauṭilīya-Artha-śāstra* (Chap. XXIV, para. 1, p. 51 ; *see* under DURGA).

(2) *See Śukranīti* under DURGA.

JALA-DVĀRA—The water-door, a gutter, a drain.

Jala-dvārāṁ punas teshāṁ pravakshyāmi niveśānām ॥

In the three following lines the positions of the water-door are described.

(*Kāmikāgama*, XXXV, 167.)

A gutter :

Kuryāt tu bhitti-mūle tu jala-dvāraṁ yatheshṭa-dik ।

(*M.*, XXXI, 99 ; *see also* IX, 310–312, under DVĀRA.)

Jala-dvāraṁ yathāsārā(-sālāṁ) nimna-deśe prakalpayet ।

(*M.*, XXXVIII, 8 ; *see also* 40.)

JALA-DHĀRĀ—The gutter-like part of the pedestal (pīṭha) of the phallus.

Nāla-tāra-tri-bhāgaikaṁ jala-dhārā-viśālakam ।

(*M.*, LIII, 23, etc.)

JALA-PŪRITA-MAṆḌAPA—A detached building where water is preserved for bathing, washing, etc.

Parjanye majjanārthāya jala-pūrita-maṇḍapam ।

(*M.*, XXXII, 56, etc.)

JALA-STHALA—A reservior of water.

In connexion with the three-storeyed buildings :

Paritaś chaika-bhāgena kūṭa-śālādi-bhūshitam ।
Tasyāntaś chāvṛitāṁśena chordhva-deśe jala-sthalam ।

(*M.*, XXI, 58–59.)

In connexion with the four-storeyed buildings :

Ekena karṇa-harmyādi tasyāntar jala-(tat)-sthalam ।

(*M.*, XXII, 78, etc.)

In connexion with the nine-storeyed buildings :

Śreshṭhaṁ nava-talaṁ proktaṁ viśva-kāntam udīritam ।
Tad-ūrdhve dvyamśa-mānena vakshye chordhve jala-sthalam ।

(*M.*, XXVII, 33, 34, etc.)

In connexion with the prākara buildings :

Shaḍ-aṅgulāvaśānaṁ syāt kramāt (? bhramāt) sarve jala-sthale ।

(*M.*, XXXI, 95.)

JALĀNTA—Foundations reaching the underground water in connexion with buildings.

(1) Khānayed bhū-talaṁ śreshṭhaṁ purushāñjali-mātrakam ।
Jalāntaṁ vā śilāntam vā pūrayed vālukair jalaiḥ ॥
(*M.*, XVIII, 6-7.)

(2) *Saṁgraha-śiromani*, by Sarayū Prasāda (XX, 23) quotes from Māṇḍayva :

Jalāntaṁ prastarāntaṁ vā purushāntam athāpi vā ।
Kshetraṁ saṁśodhya chodhṛitya śalya-sadanam ārabhet ।

(3) Vāstu-yāga-tattva by Raghunandana quotes from the *Liṅga*(*-Purāṇa*) without any reference :

Agrataḥ śodhayitvā tu bhūmiṁ yasya puroditam ।
Dvi-hastaṁ chatur-hastaṁ vā jalāntaṁ vāpi śodhya cha ॥

JALA-SŪTRA(-SŪTRADA)—A channel, a hydraulic engineer.

(1) 'The engineers of the Belāla Kings did not confine their attention to building alone, but irrigation works were also taken in hand. Tradition has it that the waters of the Yagachi which flows through a valley distant 10 miles and divided by a range of hills from the Halabid valley, were brought by a channel to supply the capital with water and fill the neighbouring tanks ; a deep cutting on the Hasan-Bailur road at the 16th mile, works the spot where the channel crossed the saddle of the hills.'—(*Ind. Ant.* Vol. I, p. 44, c. 2, para. 2 middle.)

(2) 'Where as we constructed a new dam in the Kāverī and led a channel therefrom, and the Brāhmans of Harahu made with us the following agreement in order that the channel might be brought within the limits of their village Harahu.'—*Ep. Carnat.*, Vol. III, Seringapatam Taluq, no. 139 ; Transl. p. 33, line 3 , Roman Text, p. 77, line 5.)

(3) Jalāndarava māḍisi devāṅge—'erecting a jalāndara (?) for the god' (? temple).—(*Ep. Carnat.*, Vol. III, Malavalli Taluq, no. 64 ; Roman Text, p. 147, line 3 ; Transl., p. 63.)

(4) 'Vīra-pratāya Bukka-Rāya in his court gave an order to the emperor (or master) of ten sciences (daśa-vidyā-chakra-varti), the hydraulic engineer (*jala-sutra-da*) Singāya-bhaṭṭa, that they must bring the Henne river to Penugoṇḍe—and that Singāya-bhaṭṭa conducting a channel to the Siruvera tank gave to the channel the name Pratāpa-Bukka-Rāya maṇḍala channel and had this śāsana written.'

'An interesting case is recorded in this inscription : when the prince Bukka Rāya was Governor of Penugoṇḍa in A. D. 1388, he ordered the hydraulic engineer to bring the Henne river (the modern

Pennār) to the city. Accordingly a channel was made from Kal-lūḍi to the Siravera tank, 10 miles to the north. How the water was carried beyond that does not appear. An amusing accounr is given of the accomplishments of the engineer who was mastet of ten science '

Jala-sūtra-svara-śāstre rasa-vaidye satya-bhāshāyām ।
Rudraya-siṅgari-bhavataḥ sadṛiśaḥ ko vā mahī-tale śūraḥ ॥

(*Ep. Carnat.*, Vol. x, Goribidpur Taluq, no. 6 ; Roman Text, p. 259 f. ; Transl., p. 212 ; Preface, p. 2.

(5) ' Saying to them " you must make this channel " they sent for the last Voja's son Peda-Bayiraboja, and gave them the contract. And they dug a channel from before Peda Nandisiyūru and carrying it on below led it so as to fill the tank.'—(*Ep. Carnat.*, Vol. x, Bagepalli Taluq, no. 10 ; Roman Text, p. 285 ; Transl., p. 232.)

JĀTI—A class of buildings, a door, a type of top-room, a phallus, a kind of measure.

Keśaryādi-prāsāda-jāti—' the Kesari and other c'asses of buildings.'

(*Prāsāda-Maṇḍana-Vāstu-śāstra* of Sūtra-dhāra-Maṇḍana, VI, MS. Egg. 3147, 2253, fol. 26 b.)

A class of building :

Karṇa-madhye'natre kūṭa-koshṭhe pañjara-saṁyutam ।
Shaḍ-vargaka-samāyuktaṁ jātir eshāṁ hy-anarpitam ॥

(*Kāmikāgama*, XLV, 19 ; *see also* 7 and *cf.* L, 9, 11.)

A class of kūṭa-koshṭha or top-rooms (*Kāmikāgama*, LV, 123-128 ; *see* under KARṆA-KŪṬA).

A class of buildings (*M.*, XI, 104–107 ; XIX, 1–5 ; XXX, 175–177 ; XXXIV, 549–552 ; LV, 51 ; *see* under ĀBHĀSA).

Cf. Kechid bhadra-visesheṇa jātir uktaṁ purātanaiḥ ।

(*M.*, XXXIV, 553.)

A class of doors (*M.*, XXXIX, 28–35 ; *see* under ĀBHĀSA).

A type of the phallus (*M.*, LII, 49 ; *see* under ĀBHĀSA).

JĀTI-PRĀKĀRA—The enclosure-(buildings) of the Jāti class.

(*M.*, XXXI, 35 ; *see* under PRĀKĀRA.)

JĀTI-ŚĀLĀ (*see* JĀTI)—The śālā (hall, mansion) of the Jāti class.

Evaṁ tu jāti-śālā cha kuryād-dharmya-vaśāt sudhiḥ ।

(*M.*, XXXI, 20, etc.)

JĀTI-HARMYA—The buildings of the Jāti class.

Vaksh'haṁ jāti-harmyāṇām āyādi-lakshaṇaṁ kramāt ।

(*M.*, xxx, 169, etc.)

JĀLA-(KA, KĀ) (*cf.* VĀTĀYANA)—A latticed window, an ornament.

(1) *Mānasāra* :

In connexion with the single-storeyed buildings :

Yat tan nāmāntarālaṁ chordhve nāsikā jāla-pañjaraṁ vāpi ।

(*M.*, xix, 215.)

In connexion with the seven-storeyed buildings :

Nānā-prastara-saṁyuktaṁ jālakābhir alaṅkṛitam ।

M., xxv, 37.)

In connexion with the nine-storeyed buildings :

Toraṇādy-aṅga-nīḍaiś cha jālakādi-vibhūshitam ।

(*M.*, xxvii, 44.)

In connexion with the gopuras (gate-houses) :

Narāṇāṁ jālakaṁ sarvaṁ devānām api yogyakam ।

(*M.*, xxxiii, 572.)

In connexion with the maṇḍapas (pavilions) :

Tad eva cheshṭa-dig-vāsaṁ kuryād evaṁ tu jālakam ।

(*M.*, xxxiv, 205.)

In connexion with the door :

Jayante vā mṛige vāpi chopadvāraṁ tu jālakam ।

(*M.*, xxxviii, 19.)

In connexion with the doors of the kitchen (latticed windows are provided for the easy passage of smoke) :

Tad-ūrdhva-gamanārthāya kshudra-jālaka-saṁyuktam ।

(*M.*, xxxviii, 36.)

Devānaṁ harmyake sarvaṁ madhya-dvāraṁ tu jālakam ।

(*M.*, xxxix, 138.)

Jālakādhika-hinaṁ syād śri-hīnam artha-nāśanam ।

(*M.*, lxix, 35.)

An ornament for the feet :

Ratnāṅguliyakau hastau pādaṁ jāla-saratnakam ।

(*M.*, li, 39.)

Chāmuṇḍī jvāla (? jāla)-maulī cha bhairavī pībarālakam(-kā) ।

(*M.*, liv, 136.)

(2) *Manu-Saṁhitā* (viii, 132, etc.) :

Jālāntara gate-bhānau yat sūkshmaṁ dṛiśyate rajaḥ ।

(3) *Rāmāyaṇa* (Cock) :

V, 2, 49 : (Purīṁ) śata-kumbha-nibhair jālair gandharva-nagaropamām ।

V. 2, 53 : Mahārha-jāmbhu-nada-jāla-toranāṁ (Laṅkām) ।
V. 4, 6 : Vajra-jāla-vibhūshitaiḥ gṛiha-meghaiḥ ।
V. 8, 1 : Mahad vimānam . . . pratapta-jāmbu-nada-jāla-kṛitri-mam ।
V. 9, 22 : (Sālām). . . hema-jāla-virājitām ।
V. 54, 22 : Kāñchana-jālāni. . . (bhavanāni) ।
III, 55, 10 : Hema-jālāvṛitāś chāsaṁs tatra prāsāda-paṅktayaḥ ।

(4) *Mahābhārata* :
I. 185, 19–20 : Prāsādaiḥ sukṛitochchhrayaiḥ ।
Suvarṇa-jāla-saṁvṛitair maṇi-kuṭṭima-bhūshaṇaiḥ।
I. 134, 14 : Muktā-jāla-parikshiptaṁ vaidūrya-maṇi-śobhitam ।
Śata-kumbha-mayaṁ divyaṁ prekshāgāram upagatam ।
I. 128, 40 : Gavākshakais tathā jālaiḥ ।
II. 34, 21 : (Āvasathām) . . . suvarṇa-jāla-saṁvitān ।

(5) *Śilpa-śāstra-sāra-saṁgraha* (IX, 23) :
Eka-bhāgaś chatus stambhaś chatur-dvāraḥ sa-jālakaḥ ।
Chhādya-ghaṁṭā-yuto māḍa-śobhitaḥ śridharamataḥ ।

(6) *Kāmikāgama* (LV, 94, 158–163) :
Jālakaṁ pālakaṁ śailam aishṭaṁ kuḍyaṁ cha ishyate ।
Jālakair bahubhir yuktaṁ jālakaṁ kuḍyam ishyata ॥ (94)

The seven kinds of the latticed windows :
Ṛiju-jālakam ādyaṁ syāt gavākshaṁ kuñjarākshakam ।
Go-mūtraṁ gaṇikā-patra(ṁ) nandyāvartaṁ cha saptadhā ॥ (158)
Ṛiju-kampa-yutaṁ yat tu ṛiju-jālakam uchyate ।
Karṇa-gatyā yadā śrotraṁ gavāksham iti kīrtitam ॥ (159)
Tad eva chatur-aśrottaṁ kuñjāraksham iti smṛitam ।
Vidig vaktra-gataṁ dṛishṭiṁ go-mūtram iti kīrtitam ॥ (160)
Mūlam apy-agra-gulikā-mṛidu-bhitty-antarārchitam ।
Nānā-chchhidra-samāyuktaṁ gaṇikā-jālakaṁ bhavet ॥ (161)
Patrair vichitraṁ randhraṁ patra-jālakam ishyate ।
Patra-sūtra-gataṁ randhraṁ pradakshiṇya-krameṇa tu ॥ (162)
Nandyāvartam iti proktaṁ vedy-ūrdhve jālakaṁ nayet ।
Svayambhuvādi liṅge tu yathākāmaṁ prayojayet ॥ (163)

The situation of latticed windows :
Jalakaṁ cha kavāṭaṁ cha bāhye bāhye prakalpayet ।
Sarvvataḥ kuḍya-saṁyuktaṁ mukhya-dhāmātra-kīrtitam ॥
Chatur-dig-bhadra-saṁyuktaṁ dvāra-jālaka-śobhitam ॥
(*M.*, XLI, 8, 26.)

The ornaments and component parts of such windows :
Jālaka-stambha-kuḍyāṅga-nāsika-toraṇānvitam ।
Prastara-kshudra-sopānaṁ sopānādi-samanvitam ॥
(*M.*, XLII, 25.)

(7) *Suprabhedāgama* (XXXI, 52, etc.) :

Vedikā-jālakopetā (parvatākṛitiḥ, a building).

(6) 'He, the emperor of the south, caused to be made of stone for Vijaya-Nārāyaṇa (temple) *latticed window* (jālaka-jālakam), secure door-frame (kavāṭam), door-lintel, kitchen, ramparts, pavilion, and a pond named the Vāsu-deva-tīrtha.'

'The pierced stone-windows, which form one of the most beautiful features of the Belur temple, may be of a later date, about 1200 (refers to the inscription quoted above) and due to Ballala II.'

In connexion with the same windows, Mr. Rice quotes Mr. Fergusson : 'The richness and variety of pattern displayed in the windows of the porch are astonishing. They are twenty-eight in number, and all are different . . . The pierced slabs themselves, however, are hardly so remarkable as the richly-carved base on which they rest, and the deep cornice which overshadows and protects them.'

(*Ep. Carnat.*, Vol. V, Part I, Belur Taluq no. 72 ; Transl., p. 61 ; Roman Text, p. 61, line 7 ; Introduction, pp. XXXVI, XXXVIII, XXXIX.)

(7) *See* bars on the perforated windows.—(Chālukyān Architecture, *Arch. Surv.*, New Imp. Series, Vol. XXI, Plate XXXVII, fig. 2.)

(8) *See* samples of the perforated windows.—(*Ibid.*, Vol. XXIII, Plate LXXIV, *ibid.*, Vol. XXIX, Plate XLII.)

(9) *See* 264 kinds of geometrical and very artistic patterns of screens.—(*Jāla Kaumudi*, by Pandit Kundanlāl, pp. 188, second paging.)

JĀLA-GAVĀKSHA—The latticed window.

(1) Jāla-gavākshaka-yuktaḥ—'furnished with latticed windows.'

(*Bṛihat-Saṁhitā*, LVI, 22, *J.R.A.S.*, N. S., Vol. XI, p. 319.)

(2) Jāla-gavākshair yuktaḥ (*Bhavishya-Purāṇa*, Chap. CXXX, v. 29.)

(3) Muṇḍana jālāndravaṁ māḍisidaru—'had the latticed windows made for the Tirthankaras, which their father had had made.'—(*Ep. Carnat.*, Vol. II, no. 78; Roman Text, p. 62; Transl., p. 151.)

JĀLĪ—A trellis window or screen.

Śri-uttareśvara-deva-maṇḍape jāli kārāpita—'a trellis was caused to be made in the temple of'. . .—(Ahmadabad Inscrip. of Viśaladeva, A.D. 1251, lines 7-8, *Ep. Ind.*, Vol. V, pp. 103, 102.)

JINA(-KA) (*see* TĪRTHAṄKARA)—The temple of the Jains, the Jain deity.

(*M.*, XIX, 252 ; XXXII, 165 ; XLIII, 145, etc.)

The description of the Jain deities (*Mānasāra*, Chap. LV, 71–95):

They are either stationary or movable (71).

The general features:

Dvi-bhujaṁ cha dvi-netraiṁ cha muṇḍa-tāraṁ cha śirshakam । (72)

Sphaṭika-śveta-raktaṁ cha pīta-śyāma-ṅibhaṁ tathā । (86)

They are made in the erect, sitting or recumbent posture (line 73–76) and in the lotus-seat pose (padmāsana).

The attendant deities are Nārada, Yakshas, Vidyādharas, Nāgendra, Dik-pālas and Siddhas (lines 82–88). They are stated to be five classes (line 89).

The 24 Tīrthas (i.e. Tīrthaṅkaras or apostles) are measured according to the dasa-tāla system (line 91).

Their general features (lines 91–92):

Nirābharaṇa-sarvāṅgaṁ nirvastrāṅga-manoharam ।
Savya-vaksha(ḥ)-sthale hema-varṇaṁ śrivatsa-lāñchhanam ।

JYĀ (*see* LUPĀ)—A kind of pent-roof.

(*M.*, XVIII, 177; *see* under LUPĀ.)

JYOTIḤ (*see* LUPĀ)—A kind of pent-roof.

(*M.*, XVIII, 174; *see* under LUPĀ.)

JYOTISH-KĀNTA—A class of six-storeyed buildings.

(*M.*, XXIV, 20; *see* under PRĀSĀDA.)

JVARA-DEVĀLAYA—The temple of the god of fever, a hospital or dispensary for curing patients of fever which represents all diseases.

Agniṁ (agnau) pūsha-pade vāpi jvara-devālayaṁ bhavet ।

(*M.*, XI, 390.)

'This (no. 43 and the next following seven, 44–50, Velur, inscriptions record grants to Jvara Khaṇḍeśvarasvāmin of Velur, i.e. to the Vellore temple, which is now-a-days called Jala-kaṇṭheśvara (*North Arcot Manual*, p. 189). The name of the temple is spelt Jvara-kaṇḍeśvara in five inscriptions, Jvara-kaṇṭheśvara in two others, and Jvara-kandheśvara in one of them. The Sanskrit original of these various forms seems to have been Jvara-khaṇḍeśvara. Jvara-khaṇḍa, "the destroyer of fever" would be synonym of Jvara-hara, which is applied to Śiva in the name of one of the Kāñchipuram temples. (Sewell's *Lists of Antiquities*, Vol. I, p. 180).'—(*H.S.I. I.*, Vol. I, Velur Inscrip. nos. 43–50, p. 69, para. 2, notes 3, 4.)

Ḍ

ḌOLĀ (for Dolā)—A hammock, a swing, a litter.

(*M.*, L, 47, 152–171 ; *see* under Paryaṅka.)

T

TAKSHAKA (*see* Sthapati)—A wood-cutter, a carpenter.

(*See* details under Sthapati.)

TAḌĀGA—A tank, a pool.

(1) Mīna-manḍūka-makara-kūrmmāś cha jala-jantavaḥ ।
Kāryā dhātu-mayāś chaite karttṛī-vittānusārataḥ ॥
Matsyau svarṇamayau kuryāt maṇḍū vāpi hemajau ।
Rājatau makarau kūrmma-mithunaṁ tāmra-rītikam ॥
Etair jala-charaiḥ sārddhaṁ taḍāgam api dīrghikām ।
Sāgaraṁ cha samutsṛijya prārthayan nāgam archchayet ॥

The execution of the images of fish, shark, frog and tortoise for a tank with metals like gold, silver, copper, etc., is worth notice.

(*Mahānirvāṇa-tantra*, xiii, 167, 168, 169.)

(2) *See* Dewal Praśasti of Lalla the Chhinda (v. 20, *Ep. Ind.*, Vol. I p. 79, 83.)

(3) *See* Khajuraho Inscrip. no. iv (v. 38, *Ep. Ind.* Vol. I, p 144).

(4) *See* Śridhara's *Devapattana Praśasti* (v. 10 *Ep. Ind.*, Vol. II, p. 440).

(5) Anaṁta-prāṇi-suprīti-kāribhir bhuribhiḥ ।
Taḍāgais sāgarābhogair yo vibhūshita-bhu-talaḥ ॥

(Two pillar Inscrip. at Amaravati, no. A, Inscrip. of Keta II, v. 41, *Ep. Ind.*, Vol. VI, p. 152.)

(6) Wayside tank :
Apāṁ śālā-mālāḥ pathi pathi taḍāgāḥ ।

(Two Bhuvaneśvara Inscrip. no. A, of Svapneśvara, v. 30, *Ep. Ind.*, Vol. VI, p. 202.)

(7) Khsetreśasya tathā surālaya-varaṁ sphitaṁ taḍāgaṁ tathā bandhaṁ
Kauḍika-saṁjñakaṁ bahu-jalaṁ dīrghaṁ tathā khānitam ।

(Kanker Inscrip. of Bhanudeva, v. 7, *Ep. Ind.*, Vol. IX, p. 127.)

(8) Pratinidhim udadhīnāṁ saṁchayan toyasṛishṭer akṛita jagati-kesaryyākhyā yas taṭākam ।

'And who constructed a tank (which he called) by (his) name Jagatikesarin, which equalled the oceans, and which accumulated the downpour of water.'—(Ekamranath Inscrip. of Ganapati, v. 9, *Ind. Ant.*, Vol. XXI, pp. 200, 201.)

TAṆḌULA-MAṆḌAPA—The store-room, a granary, a detached building where stores are kept.

(*M.*, XXXII, 64 ; *see* under MAṆḌAPA.)

TADBHADRA—A site plan in which the whole area is divided into 196 equal squares.

(*M.*, VII, 18 ; *see* under PADA-VINYĀSA.)

TANTRA—Used in the same sense as ŚĀŚTRA or the science of architecture (*M.*, XI, 1, 14, 102, 145 ; *M.*, XII, 67).

Cf. ŚILPA-TANTRA (*M.*, XII, 67).

TAPASH-KĀNTA—A class of the eight-storeyed buildings.

(*M.*, XXVI, 41-42 ; *see* under PRĀSĀDA.)

TARAṄGA—Waves, an ornament or moulding employed in capitals terminating by undulating lines.

Bodhikochcha-taraṅgaṁ syāt sarvālaṅkāra-saṁyutam ।
Tad eva tuṅga-māne tu dvā-daśāṁśe vibhājite ।
Adho-bhāge tri-bhāgena taraṅgākṛiti(ṁ) vinyaset ।

(*M.* XV, 155-157, *see also* 164.)

A similar ornament of the entablature :

Devānāṁ bhū-patīnāṁ cha chordhve madhye taraṅgakam ।

(*M.*, XVI, 202.)

Taraṅga-vetra-saṁyuktaṁ kuñjarākshair alaṅkṛitam ।
Pādānāṁ cha taraṅgaṁ vā choktavat samalaṅkṛitam ।

(*M.*, L, 267-268.)

TALA (*see* BHŪMI)—The storey, the palm, the sole, a moulding of the column.

(1) *Mānasāra* :

Buildings of one to twelve storeys are prescribed for people (and animals) of different ranks :

Ekādi-dvi-bhūmyantaṁ kalpa-grāmasya harmyake bhavati ।
Ekādi-tri-bhūmyantaṁ prabhākarasya chālayaṁ proktam ।
Ekādi-chatuś-talāntaṁ paṭṭabhāk-chālayam iti kathitam ।
Tri-talādy-ashṭa-talāntaṁ narendrasya chālayaṁ proktam ।
Tri-talādi-nava-talāntaṁ mahārājasya bhavanam uditam ।
Pañcha-talādy-arka-talāntaṁ chakravarti-harmyaṁ syāt ।
Ekādi-tri-talāntaṁ yuva-rājasya chālayaṁ proktam ।
Sāmanta-pramukhānāṁ chaikādi-tri-tala-paryantaṁ syāt ।
Kshudra-bhūpasya(-pānāṁ) sarveshām ekādi-tri-tala-bhūmi-paryantam ।

Sthapati-sthāpakānāṁ tu gabhastikādikaṁ(-kānāṁ) tu yūthakānāṁ cha ।
Dvi-jāti-ś(-sm)arāṇāṁ tv-eka-dvi-tri-tala-paryantam ।
Ugraiva-jivināṁ chaiva śālaika-dvi-tri-tala-paryantam ।
Gajāśvādi-śālānāṁ talam ekaṁ kartavyaṁ prokam ।
Devānām api sarveshāṁ hary-aikādy-anta-bhūpatīnāṁ chaiva ।
Anyat sarva-jātīnāṁ nava-talaṁ kuryāt tad-ālayaṁ proktam ।
Maṇḍapaṁ nava-talaṁ kuryād bhavanam anya-raṅgaṁ vādhi-maṇḍapākāram ।
Etat tu bhūmi-lambaṁ purāṇaiḥ sarvais tantravit-proktam ।

(*M.*, XI, 127-141, 144-145.)

The sole :

Nalakāntaṁ tri-mātraṁ syāt tala-tāraṁ yugāṅgulam ।

(*M.*, LVII, 34 ; *see also* LXVI, 13, etc.)

The palm :

Tala-dīrghaṁ shaḍ-aṅgulyaṁ śeshāṁśaṁ madhyamāṅgulam ।

(*M.*, LIX, 49, etc.)

(2) Eka-bhūmaṁ dvi-bhūmaṁ vā kshudrāṇāṁ bhavanaṁ nṛiṇām ।
Śūdrāṇāṁ tri-talaṁ kuryād vaiśyānāṁ tu chatus-talam ॥
Kshatriyādeḥ pañcha-bhumir dvijānāṁ rāga-bhūmikam ॥
Saptāḍhyaṁ maṇḍalikānāṁ bhū-bhujāṁ nava-bhūmikam ॥
Ekādaśa-tala-gehaṁ vidadhyāch chakra-varttinām ॥
Udayārkārka-bhāgena hīnā ūrdhordhva-bhūmikāḥ ॥

(*Śilpa-śāstra-sāra-saṁgraha*, VIII, 29-31.)

(3) Āruroha . . . prāsādaṁ hima-pāṇḍuraṁ bahu-tala-samutsedham ।

(*Rāmāyaṇa*, VI, 26, 5, etc.)

(4) A moulding of the column.

(*Suprabhedāgama*, XXXI, 108, 105-107 ; *see* under STAMBHA.

TALPA(KA)—' A couch, bed, sofa, an upper storey, a room on the top of a house, a turret, a tower ' made of heavy and strong *udumbara* wood (*Taitt. Brā.*, I, 2, 6, 5), ' with four feet and four frame pieces (ushyala) fashioned (moulded and carved) by tvashtar (carpenter) and embroidered and inlaid.' Nuptial bedstead (*R.-V.*, VII, 55, 8 ; *A.-V.*, IV, 5, 3 ; V, 7, 12 for king and his wife ; XIV, 2, 31, 41 bridal : *Taitt. Sam.*, VI, 2, 6, 4 : *Taitt. Brā.*, II, 2, 5, 3 ; *Panch. Brā.*, XXIII, 4, 2 ; XXV, 1, 10) Compare TĀLPYA (legitimate son born in nuptial bed, Guru-lalpa (bed for preceptor). Base of the neck of a dome on the top of an edifice (*M.*, XVIII, 170).

Argalaṁ dakshiṇe bhāge vāma-bhāge tu talpakam ॥
Yugme mahati talpe cha dakshiṇasthe kavāṭake ॥

(*Kāmikāgama*, LV, 49, 42 ; *see also* 39, 48.)

TĀṬ(-Ḍ)AṄKA—An ornament for the ear of an image.

(1) Karṇe vibhūshaṇaṁ kuryān makarāṅkita-kuṇḍalam ।
Athavā svarṇa-tāṭaṅkau. . . ।

(*M.*, L, 43-44 ; *see also* 294, etc.)

(2) *See* Deopara Inscrip. of Vijayasena (v. 11, *Ep. Ind.*, Vol. I, pp. 308, 313).

(3) Tāḍaṅka-darpaṇo nāma dvitīyo'ṅkaḥ—'the second act named the reflecting ear-ring.'—(*Dhaṛa Praśasti* of Arjunavarman, line 82, *Ep. Ind.*, Vol. VIII, pp. 116, 100.)

TĀṬIKĀ—A moulding of the column, tenia.

(*M.*, XV, 60, 142 ; *see* under STAMBHA.)

Kumbhādhaś chordhva-deśe tu vaṭa-patrādi-śobhitam ।
Nimnaṁ tāṭikādīni yuktyā prāg-uktaban nayet ।

(*M.*, XV, 189-190.)

Pāda-tuṅge'shṭa-bhāge tu . . . ।
Bodhikaṁ mushṭi-bandhaṁ cha phalakā-tāṭikā-ghaṭam ।

(*M.*, XLVII, 17-18.)

Agre cha phalakāntaṁ cha tāṭikādyair vibhūshitam ।

(*M.*, L, 78.)

TĀLA-MĀNA—A sculptural measurement. In this system the length of the face (including the top of the head) is stated to be the unit (*Matsya-Purāṇa*, Chap. CCLVIII, v. 19). But it seems more logical to have the span or the distance between the tips of the fully stretched thumb and middle-finger, which is technically called tāla (*see* below), as the unit. It admits of many varieties : the ten-tāla measures are mentioned in the *Mānasāra*. But the *Bimbamāna* has reference to twelve kinds (*see* below). Each of these ten or twelve kinds is again subdivided into three types, namely, the uttama or the largest, the madhyama or the intermediate, and the adhama or the smallest. Thus an image is of daśa-tāla[1] measure when its whole length is equal to ten times the face (including the top of the head). In the largest

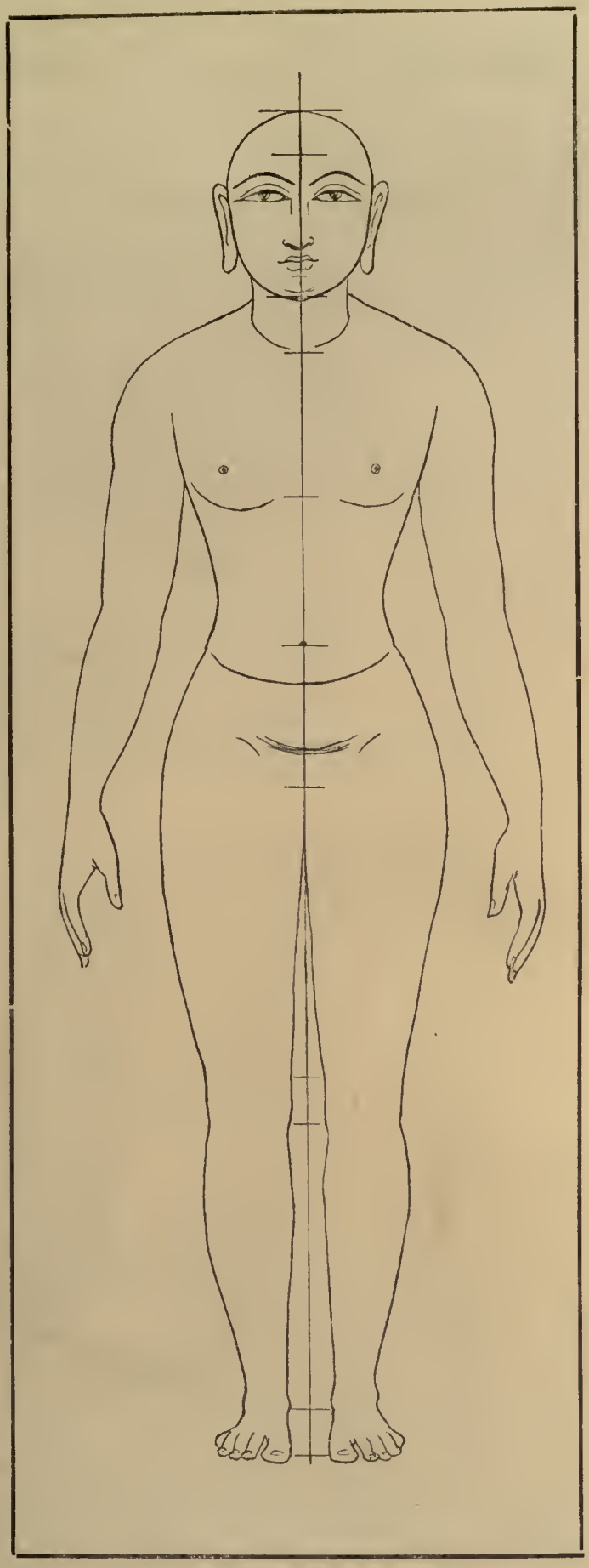
[1] The idea of daśa-tāla may have been originated from the following :

सहस्र शीर्ष्म पूरुषः सहस्राक्ष । सदभ्रपात् ।
स भूमिं सर्वत्: स्पृत्वोत्पतिष्ठद्दशांगुलम् ॥ (यु० सू० 1, R. X.)

type of the daśa-tāla system, however, the whole length is divided into 124 equal parts which are proportionately distributed over the different parts of the body; in the intermediate type, the whole length is divided into 120 equal parts, and in the smallest type into 116 equal parts. In the nava-tāla system, the whole length would be nine times the face, in the ashṭa-tāla, eight times, and so forth. The details of the following tāla measures are given in the *Mānasāra* :

The largest type of the two-tāla system in which the goose, the riding animal of Brahmā, is measured (*M.*, LX, 6–35) :

	Parts
(1) Height of head	4
(2-3) height of neck	8
(4) height (length) of heart (chest)	11
(5) (below this) height of thigh	1¾
(6) height of knee	1
(7) length of leg	1¾
(8) height of foot	1
(9) breadth of face	3
(10) at the back of the head	2
(11) length of face	4
(12) neck at the root [it tapers from bottom to top and is furnished with two faces (beaks)] ..	1
(13) length of belly (kukshi)	8
(14) place of the stomach (udara-sthāna) ..	8
(15) from the belly to the root of the tail ..	16
(16) breadth of wing	5
(17) length of wing	8
(18) height of wing	2
(19) height of wing at the edge (agra)	1
(20) thickness of wing	1
(21) length of arm (bāhu)	8
(22) elbow	1
(23) width at the forepart of the head	6
(24) width at the root of the perfectly round thigh ..	2½
(25) breadth at the forepart	1½
(26) breadth of knee	¼
(27) breadth of leg	1
(28) breadth of sole (palm)	2
(29) breadth of middle-finger at the forepart ..	4
(30) each of two fingers on either side	2
(31) length of face	3



TÁLA-MÁNA

	Parts
(32) breadth of face	1
(33) length of eye and its breadth should be proportionate	½
(34) distance between the eye-line and ear-line ..	2 yavas
(35) the crest above the head	1 or 2 parts
(36) its width ending by the back of head ..	6
(37) its breadth	4

and the rest is left to the discretion of the artist :

Śesham yuktyā prayojayet (35).

In the seven-tāla system the whole height is divided into 84 equal parts which are distributed as follows :

	Parts
(1) Crown of the head (murdhni)	2
(2) face	10
(3) neck	3
(4) (from neck to) heart	10
(5) (from heart to) navel	10
(6) (from navel to) sex-organ	5
(7) suraga (? hole) is of same parts as the back (piṭhāṁśa)	
(8) thigh (ūru)	3
(9) knee (jānu)	3
(10) leg (pāda)	3
(11) length of arm	20
(12) elbow	1½
(13) forearm (prakoshṭha)	16
(14) palm (including fingers)	8
(15) foot	11
(16) breadth of the face	7
(17) width of the neck	5
(18) width at the arm-joint	5
(19) width of the chest between armpits ..	14
(20) width by heart	12
(21) width by mid-belly	16
(22) width by loins (kaṭi)	12
(23) width of the thigh	8
(24) width of the knee	5
(25) width of the leg (jaṅghā)	4
(26) width at the ankle	3
(27) width of the sole	4

	Parts
(28) width of the forepart of arm	4
(29) width of the forearm	4½
(30) the wrist	1
(31) width of the palm	3½
and length of the plam	4
(32) length of finger	1

In the eight-tāla system the whole length is divided into 96 equal parts which are distributed as follows :

	Parts
(1) Head from the crown (ushṇīsha) to the end of the hair on the forehead	3
(2) thence the face (up to the chin)	10½
(3) thence the neck	3
(4) thence to heart	10½
(5) thence to navel	10½
(6) thence the mid-belly (up to sex organ) ..	10½
(7) the thigh (below sex organ up to knee) ..	21
(8) knee	3
(9) leg	21
(10) foot (height)	3
(11) length of foot	14
(12) breadth of face	9
(13) width of neck	6
(14) shoulder (up to arm-joint) ..	4½ (3 and 1½)
(15) width at the root of arm	6
(16) length of arm	21
(17) elbow	1½
(18) (from elbow) forearm (half of face)	5¼
(19) palm (including fingers) (equal to face) ..	10½

the rest should be as before.

In the largest type of the nine-tāla system the whole length is divided into 112 equal parts (*M.*, LIX, 14–64) :

	Parts
(1) Crown (head proper)	4
face (comprising)	12
(2) (thence) forehead (up to the eye-line) ..	4
(3) thence to tip of nose	4
(4) thence to chin	4
(5) neck	4
(6) thence to heart	12

	Parts
(7) thence to navel	12
(8) thence to sex organ	12
(9) thigh (twice the face)	24
(10) knee (=neck)	4
(11) leg (=thigh)	24
(12) foot (=knee)	4
(13) palm (from thumb to forefinger)	16
(14) arm	24
(15) elbow	2
(16) forearm	12
(17) palm (up to the tip of middle-finger) ..	12
(18) breadth of face	11
(19) width of neck	8
(20) width round the arm-joint	8
(21) width of knee	8
(22) shoulder	5
(23) chest between the armpits	20
(24) width (breadth) at the mid-belly	15
(25) width at buttocks	17
(26) width of the loins	19
(27) width at the root of the thigh	$10\frac{1}{2}$
(28) width at the root of the leg	$7\frac{1}{2}$
(29) width at the middle of the leg	6
(30) breadth at the middle of the leg	4
(31) knee-tube	$1\frac{3}{4}$
(32) ankle	$1\frac{3}{4}$
(33) heel breadth	$4\frac{1}{2}$
(34) breadth of prapada (forepart of the foot) ..	17 (?)
(35) breadth of the palm (? sole)	5
(36) length of the largest toe	4
(37) breadth of the largest toe	2
(breadth of nails is half of their length)	
(38) length of fore-toe (=thumb)	4
(39) breadth of fore-toe	1 (? 2)
(40) middle toe (breadth 7 yavas)	3
(41) fourth toe (breadth 6 yavas)	$2\frac{1}{2}$
(42) little toe (breadth 5 yavas)	2
(breadth of nails is half the breadth of the fingers)	
(43) width at the middle of the arm	7
(44) width at the elbow	7

	Parts
(45) width at the forearm	4
(46) width at the wrist	3
(47) breadth at the root of the palm	6
(48) breadth at the forepart of the palm ..	4
(49) length of the palm	6
and the remainder is the middle-fingers (?)	
(50) forefinger	$5\frac{1}{2}$
(51) ring-finger	$5\frac{1}{2}$
(52) little finger	$3\frac{1}{2}$
(53) breadth of thumb	1
(54) breadth of forefinger	6 yava
(55) breadth of middle-finger	7 „
(56) breadth of ring-finger	6 „
(57) breadth of little finger	4 „

Fingers are made tapering from the root towards the tip. The forepart of the nails is $\frac{1}{3}$ or $\frac{1}{4}$ more than their length and their breadth at the tip is one, two, or three yavas. The thumb is divided into two parts (parvan) and the other fingers into three parts (parvan). The line of wisdom and such other lines are drawn on the palm. The eyebrow should extend from the eye-line to the hair (near the ear).

(58) Length of eye	2
(59) breadth of eye	1
(60) length of ear	4
(61) drum of ear	4
(62) breadth of ear	2

the rest should be as in the (uttama) daśa-tāla system :

Navatālottamaṁ proktaṁ śeshaṁ cha daśa-tālavat | (64).

In the intermediate type of the nine-tāla system the whole length is divided into 108 equal parts :

	Parts
(1) Head	3
(2) neck	3
(3) knee	3
(4) foot	3
(5) face	12
(6) chest	12
(7) belly	12

	Parts
(8) loins	12
(9) thigh	24
(10) leg	24
(11) arm	24
(12) (from arm) forearm (including middle-finger) ..	18
(13) largest toe (up to heel) =face	12
(14) foot	15

the rest should be discreetly made.

In the smallest type of the ten-tāla system the whole height is divided into 116 equal parts (*M.*, LIX, 67–100) :

	Parts
(1) Head (from crown to hair-line in the forehead) ..	4
face (comprising)	12
(2) thence to the eye-line (i.e., forehead) ..	4½
(3) thence to the tip of the nose	4
(4) thence to the chin	3½
(5) neck-joint	1½
(6) neck	4
(7) thence to heart	12
(8) thence to navel	12
(9) thence to sex organ	12
(10) thigh (from below sex organ)	25
(11) knee	4
(12) leg	25
(13) foot	4
(14) length of foot from heel to largest toe ..	16½
(15) length of arm below the line of windpipe (glottis)	25
(16) length of elbow	2
(17) length of forearm	19
(18) length of palm (up to the tip of middle-finger) ..	12½
(19) breadth of face	11½
(20) width of neck	8½
(21) width of arm	8½
(22) width of knee	8½
(23) width of arm by root, elbow, wrist ..	6, 6, 1½
(24) length of shoulder	20½
(25) width of the mid-belly	15½
(26) width of the buttocks	18½
(27) breadth of the loins	19
(28) width at the root of thigh	12½

	Parts
(29) width of the knee-(cap)	6½
(30) breadth or width of knee-tube	4
(31) breadth of ankle	5
(32) prapada (tip of the toes)	6
(33) length of largest toe	4
(34) length of fore-toe	4
(35) length of other toes (half a part less) ..	3½
and their breadth or width is the same (? half of their length)	
(36) breadth of elbow	6½
(37) breadth of forearm	5
(38) breadth of wrist	4
(39) breadth of palm	5
(40) length of palm	7
(41) length of middle-finger	5½
(42) length of forefinger	5
(43) length of ring-finger	5
(44) length of little finger	4½
(45) length of thumb	4½
(46) length of ear	4½
(47) height of ear-drum	4½
the rest not specified here should be as in case of the largest type of ten-tāla system.	

In the intermediate type of the ten-tāla system the whole height of the image (of a famale deity) is divided into 120 equal parts (*M.*, LXVI, 2–78) :

	Parts
(1) Head (from crown to hair-line on the forehead)	4
(2) forehead (up to eye-line)	5
(3) nose (up to the tip)	4
(4) thence to chin	3½
(5) neck-joint	½
(6) neck	4
(7) from windpipe (glottis) to heart	13
(8) thence to the limit of navel	13
(9) thence to sex organ	13
(10) thigh below sex organ	26
(11) knee	4
(12) leg	26
(13) foot	4

	Parts
(14) length of foot (from heel to the tip of largest toe)	16
(15) length of arm below the line of windpipe (glottis)	26
(16) elbow	2
(17) forearm	20
(18) palm (up to the tip of middle-finger) ..	13
(19) middle-finger	6
and palm proper the remainder	7
(20) thumb	4
(21) forefinger	5½
(22) ring-finger	5½
(23) little finger	4
(24) breadth of face up to ear	12
(25) breadth of face (below this) from ear to ear	11
(26) breadth of neck (at root, middle, and top) ..	7
(27) breadth of chest (between armpits) ..	15
(28) width of each breast	9½
(29) height of breast	4½
(30) distance between breasts (nipples)	1
(31) width of the nipple	2
(32) breadth (below the breasts) by the heart ..	13
(33) width of mid-belly	11
(34) breadth (below this) by the navel	13
(35) breadth (of lower belly) below navel ..	15
(36) width of buttocks	20
(37) width of loins	24
(38) width at the root of each thigh	13
(39) width by the mid-thigh	12
(40) width at the fore-part of the thigh ..	9
(41) width of knee	7
(42) width at the root of leg	6
(43) width at the mid-leg	5
(44) breadth of knee-tube	4
(45) breadth of ankle	4½
(46) width of sole	4
(47) breadth of sole at the fore-part	5
(48) breadth of heel	4
(49) length of largest toe	4
(50) length of fore-toe	4
(51) length of middle-toe	3½
(52) length of fourth toe	3

	Parts
(53) length of little toe	2
(54) width (breadth) of largest toe	2
(55) width (breadth) of fore-toe	1(=8 yavas)
(56) width (breadth) of middle toe	7 ,,
(57) width (breadth) of fourth toe	6 ,,
(58) width (breadth) of little toe	5 ,,
(59) width at the root of arm	3
and width of knee	10
(60) width at mid-arm	6½
(61) width at fore-part of arm	6
(62) width at elbow	5½
(63) width at root of forearm	5
(64) width at middle of forearm	4½
(65) width at fore-part of forearm	4
(66) width at wrist	3
(67) width (breadth) of the palm (from thumb to little finger)	5
(68) width (at the root) of the fore finger ..	6 yavas
(69) width (at the root) of ring-finger (same) ..	6 ,,
(70) width (at the root) little finger	5½ ,,
(71) width (at the root) of middle-finger ..	7 ,,
Eyebrows are placed between forehead and eyes.	
(72) Breadth of eye	1
(73) length of eye	3
(74) breadth of nose up to end of the tip ..	2
(75) width of nose at the middle	1
(76) width of nose at the root	½
(77) distance between the eyes	1¾
(78) distance between the eyebrows	1
(79) length of eyebrow	9
(80) breadth of eyebrow	2
The interior of the eye is divided into three (equal) parts (as before), of which the black sphere is one part; the rest of the detail is stated to be found in the list of the largest type of the ten-tāla systems.	
(81) Breadth and height of nostril (each) ..	½
(82) width of face (up to the corner)	4
(83) width of upper lip	5 yavas
(84) width of lower lip	6 ,,
(85) length of lip	2

	Parts
(86) ear=mid-eyebrow	(?)
(87) height of ear	4
(88) length of the drum of ear	4
(89) depth (of the drum of ear)	½
(90) width of sex organ	4
(91) length of sex organ	7
(92) upper breadth of sex organ (=length) ..	7

The rest should be as in the case of the largest type of the ten-tāla system.

In the largest type of the ten-tāla system the whole height of a male person (god) is divided into 124 equal parts (*M.*, LXV, 2-179) :

	Parts
(1) Head (from crown to hair-line on the forehead)	4
(2) face (from hair-line on the forehead to chin) ..	13
(3) neck	4½
(4) neck to heart (chest)	13½
(5) heart to navel	13½
(6) naval to sex organ	13½
(7) thigh from below sex organ	27
(8) knee	4
(9) leg	27
(10) foot	4

The length of face is divided into three parts, head to eye-line, eye-line to lip-line, lip-line to windpipe-line.

(11) Length of arm from (below the line of) windpipe	27
(12) elbow	2
(13) forearm (extending to wrist-joint)	21
(14) length of palm (up to the tip of middle-finger)	13½
comprising (*a*) palm proper	7
(*b*) middle-finger	6½
(15) length of foot	17
(16) largest toe (from heel)	4¼
its breadth	2⅛
its nail	1 11/16
breadth of nail	¾

The nail is made circular and its fore-edge is fleshy and one part in extent.

(17) Fore-toe	4 less 1 yava
its breadth	1 and 1 yava

	Parts
(18) middle toe	$3\frac{3}{4}$
its breadth	$1\frac{1}{2}$
(19) fourth toe	3 plus 1 yava
its breadth	1 minus 1 yava
(20) little toe	$2\frac{1}{2}$
its breadth	$\frac{3}{4}$ plus 1 yava
Their nails are half of their respective breadths.	
(21) The middle line from ankle to the tip of sole ..	8 and 6 yavas
(22) from this line to the root of heel	4
breadth of heel	5 and 1 yava
(23) from side to heel	$3\frac{1}{2}$
(24) root of heel	6
(25) width of mid-sole (below ankle)	6 and 6 yavas
(26) breadth of sole (at the fore-part)	6
(27) its thickness	3
(28) height of the mid-foot	$4\frac{1}{2}$
The toes have two parts (parvan).	
(29) Breadth of ankle	$5\frac{1}{4}$
(30) breadth of the tube (above)	$4\frac{1}{4}$
(31) breadth at the middle of leg	$6\frac{1}{2}$
(32) width at the root of leg	8
(33) width of knee	9
(34) width of mid-thigh	12
(35) width at the root of thigh	$13\frac{1}{2}$
(36) width of loins	20
(37) width of buttocks (above)	$18\frac{1}{2}$ (?)
(38) width of mid-belly	$18\frac{1}{2}$
(39) width at the heart	16
(40) width by the chest	$18\frac{1}{2}$
(41) distance between the armpits	21
(42) breadth above this	22
(43) breadth between the arms	$24\frac{1}{2}$
(44) breadth of neck	9
(45) breadth of face in its fore-part	12

	Parts
(46) breadth of head by the hair-line on the forehead	10

From the hair-line on the forehead to the eye-line there are two (equal) parts, one of which is the forehead, and the remainder is the eye-part. Between the forehead and the eyes, the places for eyebrows are left.

(47) Length of eyebrow	5
(48) breadth of eyebrow	$2\frac{1}{2}$

The breadth at the middle is half of this and the brows taper from root to the other end.

(49) Distance between two brows	$\frac{1}{4}$ and 6 yavas
(50) length of eye	3
(51) breadth of eye	1
(52) distance between two eyes	2

The interior of the eye is divided into three parts of which the black sphere is one part and the remainder is the white sphere. The shiny sphere within the black sphere is one part. The sight (retina) proper is situated within the shiny sphere. The upper and lower coverings (lids) of the interior of the eye are each two parts. The eyes are shaped like the fish and the brows like a bow.

(53) Length of ear	
(54) drum of ear	$4\frac{1}{2}$
(55) fore-part of ear (=mid-brow)	$1\frac{1}{4}$
(56) ear-hole, its length	2
and breadth	1
(57) distance between the drums	2
(58) depth (befitting the ear)	1
(59) breadth of ear	$2\frac{1}{2}$

The rest is left to the choice of the skilful.

(60) Distance from eye to ear	7
(61) width of nose	$2\frac{1}{2}$
(62) tip of nose	1
(63) breadth of nostril	$\frac{1}{2}$
(64) length of nostril	6 yavas
(65) hole of nostril	$\frac{1}{2}$
(66) its breadth	5 yavas
(67) height of nose-tip (pushkara or four-faced part)	1
(68) breadth of nose-tip	2
(69) breadth of the middle of nose	3

	Parts
(70) breadth at the root of nose	1½
(71) height of nose	1½
(72) height of nose (from bottom to tip) ..	2
(73) tip (from below bottom)	4 yavas
(74) drip	1 ,,
(75) breadth	3 ,,
(76) circumference (above this)	1 ,,
(77) breadth of upper lip below this	6 ,,
(78) lower lip	1
(79) width of upper lip	4
(80) length of crescent-shaped lower lip	3½
(81) three-faced part (trivaktra), length and breadth ..	2 each
(82) circumference (above)	2

Teeth numbering 32 are in both lower and upper jaws.

(83) Chin below the lower lip	1
(84) length of jaw	3½
(85) from this (jaw) to ear-joint	10
(86) height of drip between the jaws	1
(87) breadth of semi-circular jaw	1¾
(88) goji (nose bottom) from jaw	1 and 2 yavas
(89) mid-neck (from jaw to its root)	2
(90) its projection	1

(91) the eye on the forehead (third eye) ½ or ¾ part of other eyes. There should be 98 eye-lashes ; the hairs on the neck and face should be discreetly made.

	Parts
(92) Width at mid-arm	8 and 2 yavas
(93) width of elbow	7
(94) width at mid-forearm	5 and 1 yava
(95) width of wrist	3½
(96) breadth at the root of palm	7
(97) breadth of mid-palm	6½
(98) breadth of fore-palm	5 and ½ yava
(99) back of palm up to wrist	6½

thence the length of the fingers should be proportionate as stated before.

(100) Length of ring-finger and of middle-finger ..	4¼ each

	Parts
(101) length of forefinger	5
(102) length of thumb	4
(103) length of little finger	4
(104) width at the root of thumb	1¼
(105) width at the root of forefinger	1
(106) width at the root of ring-finger	1
(107) width at the root of middle finger	¾

The width of (tapering) fingers at their tips is ⅜ or one-fourth less than at the root. The width of the nails is ⅔ of the breadth of the respective finger tips, and the length of the nails is ¼ greater than their width, and the fore-parts of the nails measure two yavas. The four fingers (beginning with the fore-finger) are each divided into three parts and the thumb into two parts.

(108) The portion between the roots of forefinger and thumb	3
(109) its thickness	2
(110) thence to wrist	4½
(111) thickness of the portion below the thumb ..	2½
(112) its width	3
(113) breadth of heel	4
(114) its thickness	3
(115) its fore-part	1 and 2 yavas
(116) interior of palm	2
(117) its width	4 yavas

The palm is lined with the five marks like of lotus, trident, couch, disc., etc. And the rest regarding the hand should be discreetly made by the wise artist.

Measurement by the back-side :

(118) width at the back of head	9
(119) thence to the end of ear	13½
(120) thence to the end of nose	13½
(121) shoulder (above the line of windpipe) from the neck-joint	4
(122) from neck-joint to hump	5
(123) thence to the line of buttocks	27
(124) thence to anus	13½
(125) breadth to the left of it	21
(126) width of the back of loins	17

	Parts
(127) width of the back or middle-body (madhya-kāya) above this	17
(128) distance between the breadth above this ..	21
(129) distance between the arm-pits	27
(130) drip of the back-bone	1
(131) breadth of the loins-joint connected with the back-bone	2

Thence should be measured the belly :

(132) Width (breadth) of ribs-plank	12
(133) distance between ribs-planks	4
(134) height from ribs-plank to shoulder	$5\frac{1}{2}$
(135) the portion between the breast and back-bone (bṛihatī)	7
(136) its length (up to armpits)	(?)
(137) bṛihatī up to breast limit	$16\frac{1}{2}$
(138) breadth of loins line	13
(139) projection of the root of thigh	5
(140) width of perfectly round or spherical balls ..	9
(141) width at the back of perfectly round breast ..	2
(142) drip or depth of windpipe	1 yava
(143) drip or depth of heart	1
(144) distance between the limit of breasts ..	$13\frac{1}{2}$
(145) distance between windpipe and armpit ..	$13\frac{1}{2}$
(146) depth of navel	2 yavas

The navel-pit is made circular.

(147) Length of lower belly from navel to loins ..	6
(148) lower belly from navel to where cloth is attached to body	4
(149) height from loins to the root of sex organ ..	$7\frac{1}{2}$
(150) breadth of sex organ at the back	4
(151) thence (? loins) the length of sex organ ..	12
(152) length of testicle	$2\frac{1}{2}$
(153) breadth of testicle	$2\frac{1}{2}$
(154) breadth of sex organ	1

The rest is left to the discretion of the artists.

Śesham yuktito nyaset—(*M.*, LXV, 179.)

This largest type of the ten-tāla measure is used in measuring the images of Brahmā, Vishṇu, Rudra, and such other gods (*M.*, LI, 29 ; XLV, 184–185) and of the statues of the devotees of the Sāyujya class (*M.*, LIX, 12).

These rules are for the general guidance, there is no restriction in altering them for aesthetic reasons by not more than one part :

Tad evādhika-hīnaṁ vā śobhārthaṁ chaika-mātrakam ।
Ukta-mānāṅgakaiḥ sarvaiḥ tatra dosho no vidyate ।
Tad-ūrdhve'dhika-hīnaṁ chet sarva-dosha-samudbhavam ।
Tasmāt pariharech chhilpi pratimānaṁ tu sarvadā ।

(*M.*, LXV, 180–183.)

(2) *See Aṁśumadbheda* of Kāśyapa (*MS. Egg.* 3148, 3012 ; fol. 251, different kinds of the tāla measures).

(3) Tālaḥ smṛito madhyamayā gokarṇaś chāpy-anāmayā ।
The distance between the tips of the fully stretched thumb and the middle-finger is called Tāla.

(*Brahmāṇḍa-Purāṇa*, Part I, 2nd *Anushaṅga-pāda*, Chap. VII, v. 97.)

(4) Tāla is the distance between the tips of the fully-stretched thumb and the middle-finger.

(*Suprabhedāgama*, XXX, 22, *see* under AṄOULA.)

(5) *Bimbamāna* (British Museum, MS. no. 558–592) :

Illustration in minute detail of the largest type of the ten-tāla measure (vv. 71–72).

Description of the plumb-lines and the horizontal measurement of the idol (vv. 73–91).

The measurement of the idol when it is made in the sitting posture, such as Yogāsana (vv. 92-122) and the recumbent posture (vv. 123–138).

In an appendix are given the rules regarding the objects to be measured in twelve-tāla measures :

One (eka) tāla is used for measuring the vandhukā, probably misread for kabandha, a headless trunk, also a class of rākshasa or demon whose ' head and thighs were forced into the body by Indra and reduced to long arms and a huge mouth in the belly.' (*See* nos. 5, 6.)

Two (dvi) tāla is used for measuring the birds.

Three (tri) tāla „ „ „ „ kinnaras (mythical beings with human body and horse's head).

Four (chaturthaka) tāla is used in measuring bhutas (goblins).

Five (pañcha) tāla „ „ „ Gaṇeśa (a mythical deity with human body and elephant's head).

Six (shaṭ) tāla is used for measuring the tiger.

Seven (sapta) tāla „ „ „ „ yakshas (demi-gods).

Eight (ashṭa) tāla „ „ „ man (male and female).

Nine (nava) tāla „ „ „ dānavas (demons).

Ten (daśa) tāla „ „ „ superhuman beings and Buddha.

Eleven (ekādaśa) tāla is used for measuring gods.
Twelve (dvādaśa) tāla is used for measuring rākshasas (fiends).

Cf. Brahmādi-lokeśvara-deva-devaṁ surāsura-dānava-rākshasaṁ cha yakshaṁ cha nāga-garuḍaṁ cha nā-kinnaraṁ bhutaṁ cha kumbhāṇḍa-nara-svarupaṁ vyāghraṁ chatush-pāda-vihaṅga-mādi-sarvaṁ tu dirghāyata-vandhukādi-tāla-pramāṇaṁ bhuvanatrayoktam ।

This is followed by the details of the twelve tāla measures quoted above.

The next appendix gives the dhyānas (features) of the eight deities (ashṭa-nātha).

(6) *Suprabhedāgama* (xxxiv, 30–34).

Īśvarādi-chatur-murttiṁ daśa-tālena kārayet ॥
Śaktīnām anya-devānāṁ nava-tālaṁ prakīttitam ।
Divyam ārsha-manushyāṇām ashṭa-tālena kārayet ॥
Rakshasām asuraṇāṁ cha sapta-tālena ihochyate ।
Shaṭ-tālenaiva gandharvān pañcha-tālena vighnakam ॥
Vāmanāt (-naṁ) pañcha-tālais tu chatus-tālais tu bhūtakān ।
Tritālaṁ kinnarāṇaṁ tu matsyānāṁ tu dvi-tālakam ॥
Eka-tālas tu kusmāṇḍāt (?) piśācha viṁśad-aṅgulāḥ ।
Sthūla-sūkshma-prabhedāṁs tu tāla-bhedam ihochyate ॥

Measures of the ten tāla of three types each (*Suprabhedāgama* xxx, 31–40) :

Pratimāyās tad-utsedhaṁ tāla-daṇḍena bhājayet ॥ (31)
Chatur-viṁśach chhataṁ chaiva uttamaṁ daśa-tālakam ।
Viṁśach chhataṁ cha madhyaṁ tu kanyasaṁ shoḍaśādhikam ॥ (32).
Dvā-daśādhikam evaṁ yan nava-tālottamaṁ bhavet ।
Ashṭau śataṁ chatuḥ śataṁ madhyamaṁ kanyasaṁ tathā ॥ (33)
Śataṁ shaṇ-ṇavatiś chaiva navaty-uttara-kara-dvayam ।
Ashṭa-tālam idaṁ proktam tri-vidhaṁ purvaḥ-paddhatiḥ । (34)
Ety-evaṁ bhāga-hīnaṁ syād eka-tālaṁ tam eva hi ।

Measurement of the face :

Trayo-daśārdhaṁ mukhaṁ jyeshṭhaṁ trayo-daśaṁ tu madhyamam ॥ (35)
Tad-dvā-daśārdham adhamam uttamat(-ṁ)daśa-tālake ।
Nava-tālottame chaiva mukhaṁ vai dvā-daśāṅgulam ॥ (36)
Ardhārdhāṅgula-hīnena madhyamādhamam uchyate ।

The statues measured in these tāla measures (*cf.* above xxxiv, 30–34) :

Tri-vidhā daśa-tālena tri-murttināṁ tu kīrttitā ॥ (37)
Tri-vidhaṁ nava-tālena devānāṁ yoshitām api ।

Ashṭa-tālena martyānāṁ sapta-tālena rakshasām ॥ (38)
Shaṭ-tālena tu gandharvān pañcha-tālo gaṇādhipaḥ ।
Vāmanasya tathaiva syāch chatus-tālās tu bhutakāḥ ॥ (39)
Tri-tālaṁ kinnarāṇāṁ tu matsyānāṁ tu dvi-tālakam ।
Anujānāṁ tathaikaṁ syāt piśāchānāṁ tu vimśatiḥ ॥ (40)

(7) *Matsya-Purāṇa* (Chap. CCLVIII, v. 19) :

Svakiyāṇguli-mānena mukhaṁ syād dvā-daśāṅgulam ।

(8) *Bṛihat-Saṁhitā* (LVIII, 4) :

Svair aṅgula-pramāṇair dvā-daśa-vistīrṇam āyatam cha mukham ।
Naganajītā tu chatur-daśa-dairghyeṇa drāviḍaṁ kathitam ॥

According to one's own aṅgula (finger-breadth) the face of his own statue is twelve aṅgulas long and broad. But according to (the architect) Nagnajit it should be fourteen aṅgulas in the Drāvida style.

The commentary quotes Nagnjit in full :

Vistīrṇaṁ dvādaśa-mukhaṁ dairghyeṇa cha chatur-daśa ।
Aṅgulāni tathā kāryaṁ tan-mānaṁ drāvidaṁ smṛitam ॥

The face shall be 12 aṅgulas broad and 14 aṅgulas long ; such a measure is known as Drāviḍa (i.e. this is the Drāviḍa style of measurement).

(*Bṛihat-Saṁhitā*, LVIII, 4 ; *J. R. A. S.*, N. S., Vol. VI, p. 323, note 3.)

(9) *See The Elements of Hindu Iconographgy* by T. A. Gopinatha Rao, Vol. I, Appendix B.

(10) *See Some Hindu Silpa Śāstras* in their relation to South *Indian Sculpture* by Mr. W. S. Hadaway (Ostasiatische Zeitschrift, April-June, 1914, vol. II, no. I).

(11) *See Iconometry* by T. A. Gopinath Rao (*Archaeological Survey of India*, Memoir, no. 3, 1920) and compare : ' In Appendix B, the author (Gopinatha Rao) gives a detailed description of the uttama-daśatāla measure to be used in the making of images, and shows that the formal, apparently mechanical, rules for construction followed by Indian artists work out in practice as the adequate expression of aesthetic principle. The same subject has been treated on broader lines . . ., by Mr. W. S Hadaway (*see* above), who is himself a worker in metal, with practical knowledge of the application of the rules. (The war, unfortunately, has prevented the author from continuing his valuable study, as he had hoped to do). '

' The Hindu image-maker or sculptor, ' Mr. Hadaway observes, ' does not work from life, as is the usual practice among Europeans, but he has, in place of the living model, a most elaborate and beautiful system of proportions, which he uses constantly, combining

these with those observations and study of natural detail. It is, in fact, a series of anatomical rules and formulæ, of infinitely more practical use than any European system which I know of, for the Indian one treats of the actual proportion and of the surface form, rather than the more scientific attachments of muscles and the articulation of bones.'

'There is in the Hindu system nothing complicated or difficult to understand or remember, but like every other canon of artistic proportion, these methods are no more capable of producing works of art in unskilled hands than are any other aids or methods . . . These śāstras are the common property of Hindu artisans, whether of northern or southern India.'—Mr. V. A. Smith.

(Architecture and Sculpture in Mysore, *Ind. Ant.*, Vol. XLIV, pp. 90-91.)

TITHI—One of the six varga-formulas (*see* details under SHAḌVARGA) for ascertaining the right dimensions for an architectural object.

TILAKA—A mark made on the forehead and between the eyebrows either as an ornament or as a sectarian distinction of an image.

(*M.*, VII, 160, LI, 41.)

Cf. Tilaka-kshudra-nāsī-yuktaṁ toraṇaiś cha amanvitam ।

(*Kāmikāgama*, L, 93.)

TILAMAKA—A channel, a watercourse, a pipe.

(1) Viditam astu bhavatām . . . yushmadīya-grāmāṇām upakārāya yo'sau tilamaka ānito'bhūt pratisaṁskārābhāvād vinashṭam udvikshya . . . yushmad-grāmāṇām evopakārāya pratisaṁskṛitaḥ ।

'Be it known to you that, seeing the *watercourse*, which the illustrious lord and great king Aṁśuvarman led to your villages for your benefit, destroyed through want of repairs (we being addressed by the feudal chief Chandravarman, have presented it to him; that he, with our permission) has repaired it for the benefit of your villages.'

'The word, tilamaka, is not found in any dictionary. But it seems certain, from the context, that it must be some kind of watercourse. Probably it denotes a channel which leads the water from the hillside over the fields which rise in terraces one above the other.'—Pandit Bhagvānlāl Inderjit and Dr. Bühler.

(Inscriptions from Nepal, no. 9, Jishnugupta's Inscrip., line 6 f., *Ind. Ant.*, Vol. IX, p. 172, note 30.)

(2) Devena yathāyaṁ tilamako bhabatam anyesh(eṇ)āṁ chopakārāy ।

(Inscription from Nepal, no. 10, line 14, p. 173.)

(3) Tilamakāś cha saptadhā vibhajya paribhoktavyaḥ ।

'The watercourse is to be used by dividing it into seven parts.'

(*Ibid.*, no. 14, line 10, p. 177.)

TIRTHA (*see* TĪRTHAṄKARA)—A stairs of a landing place, a shrine, a holy place, a Jain teacher.

TIRTHAṄKARA—A path-maker, the foundation of a religious or philosophical school, a Jain arhat or saint.

The twenty-four Jain saints or apostles—(*M.*, LV, 90.)

Cf. Fergusson, *Hist. of Ind. and East. Arch.* (p. 748) :

	Name	*Distinction sign*
1.	Ādinātha	Bull.
2.	Adjitanātha	Elephant.
3.	Śambhunātha	Horse.
4.	Abhayānandanātha	Monkey.
5.	Sumatinātha	Chakwa (red goose).
6.	Supadmanātha	Lotus.
7.	Supārśvanātha	Swastika.
8.	Chandraprabha	Cresent moon.
9.	Pushpadanta	Crocodile.
10	Śitalanātha	Tree or flower.
11.	Śrī-Aṁśanātha	Rhinoceros.
12.	Vasupadya	Buffalo.
13.	Vimalanātha	Boar.
14.	Anantanātha	Porcupine.
15.	Dharmmanātha	Thunderbolt.
16.	Śāntanātha	Antelope.
17.	Kunthanātha	Goat.
18.	Aranātha	Fish.
19.	Mallinātha	Pinnacle.
20.	Munisuvrata	Tortoise.
21.	Naminātha	Lotus with stalk.
22.	Neminātha	Shell.
23.	Pārśvanātha	Snake.
24.	Vardhamāna or Mahāvīra ..	Lion.

For reference to their images *see* JINA(ka).

TUṄGA (*see* UTSEDHA)—Height, plinth, vault, arched roof.

(*M.*, XIX, 120.)

TULĀ (*see* under STAMBHA)—A balance, a moulding of the column, a month, a beam.

(1) Stambha-samaṁ bāhulyaṁ bhāra-tulānām upary-upary-āsām ।
Bhavati tulopatulānām ūnaṁ pādena pādena ॥
(*Bṛihat-Saṁhitā*, LIII 30 : *see* Kern's Transl., *J. B. A. S.*, N. S., Vol. VI, p. 285.)

A moulding of the entablature :

(2) Mahā-bhāra-tulā kāryā balikordhve viśeshataḥ ।
Tulā-vistāra-tārochchā jayantī syāt tulopari ॥
Tulā-balikayor madhye dvi-daṇḍam athavā punaḥ ॥
(*Kāmikāgama*, LIV, 13, 16.)

(3) A member of a column (*Suprabhedāgama*, XXXI, 108, 105–107, *see* under STAMBHA).

(4) The name of a month (*M.* VI, 32), the beam of a balance (*M.*, XII, 163), a balance (*M.*, L, 48, 172–195.)

TULĀ-DAṆḌA—The horizontal rod of a balance, the beam, its synonyms.

Tulādaṇḍaṁ jayantī cha phalakā-paryāya-vāchakāḥ ।
(*M.*, XVI, 48, etc.)

TULĀ-BHĀRA—An article of furniture used as a hanging balance.

Bhupānāṁ cha tulā-bhāra-tulā-lakshaṇaṁ uchyate ।—(*M.*, L., 48.)

In connexion with the pavilion:

Evaṁ tu nṛipa-harmye tu tulā-bhāraṁ tu yogyakam ।
(*M.*, XXXIV, 287.)

TAILA-MAÑJŪSHIKĀ—An oil-pot, used as an article of furniture.
(*M.*, L, 144 : *see* under BHŪSHAṆA.)

TORAṆA—An arch, a canopy, a gate-way of a temple or stūpa, a peg, a mechanical arrangement of blocks of any hard material disposed in the line of some curve and supporting one another by their mutual pressure. It is employed both as an architectural member, as well as an ornament to buildings, thrones, pedestals for an image, boundary walls, and over gate-ways, cars and chariots.

In modern architectural treatises arches are considered in three aspects, namely, (i) form, (ii) the mode in which their parts are constructed, and (iii) the thrust they exert.

In respect of their form arches are either straight, triangular, semi-circular or circular. The *Mānasāra* adds another form called bow-shape which is apparently a little wider than the

semi-circle. 'The investigation of the equilibrium of arches' as truly said by Mr. Gwilt (*Encycl.*, article 1353), 'by the laws of statics does not appear to have at all entered into the thoughts of the ancient architects. Experience, imitation and a sort of mechanical intuition seem to have been their guides. They appear to have preferred positive solidity to nice balance and the examples they have left are rather the result of art than of science. Vitruvius, who speaks of all the ingredients necessary to form a perfect architect (*see* under STHAPATI), does not allude to the assistance which may be afforded in the construction of edifices by a knowledge of the resolution of forces nor the aid that may be derived from the study of such a science as descriptive geometry, though of the latter it seems scarcely possible the ancients could have been ignorant, seeing how much it must have been (practically, at least) employed in the construction of such vast buildings as the Coliseum, and other similarly curved structures, as respects their plan.'

(2) 'Whoever invented the true or radiating arch, the Romans were the first who applied it as a regular and essential architectural feature, and who at the same time introduced its complements, the radiating dome, into architectural construction at what period it is not now known.' (Fergusson : *Hist. of Ind. and East. Architecture*, p. 212.) But we have got clear references to it in the *Rāmāyaṇa* (*see* below) which must be placed before sixth or seventh century B C.

(3) *Mānasāra*, Chap. XLVI (named Toraṇa) 1-77 :

The toraṇa is an ornament (bhūshaṇa) for all kinds of thrones (line 1), as well as for temples and royal palaces (line 30). These arches admit of various forms. They may be circular, semi-circular, triangular (? hexagonal, tri-yugma), bow-shaped, or of any other desirable forms (lines 31–32, 33–36). The directions for making these arches as well as the measurements of their different parts are given in detail (lines 3–29, 45–76). With regard to ornaments and decorations, arches are divided into four kinds, technically called, Patra-toraṇa (leaf-arch), Pushpa-toraṇa (flower-arch), Ratna-toraṇa (jewelled arch), and Chitra-toraṇa (ornamental-arch) (lines 37–38).

All these arches are both structurally and ornamentally decorated with the carvings of gods, sages, demi-gods, goblins, crocodiles, sharks, fishes, leographs, serpents, lions, flowers, leaves, creepers, etc., and are beautifully set with jewels :

Sarveshāṁ toraṇa-madhye chordhve tumburu-nāradam ।
Tad-pradeśe dvi-pārśve tu makarādi-vibhūshitam ।

Toraṇasyāgra-mūle tu grāha-patraiś cha bhūshitam ।
Toraṇādyaṁ tu patrādi-bhūta-vyāla-samanvitam ।
Pādānāṁ cha dvi-pārśve tu vyāla-toraṇa-dhāriṇam ।
(*M.*, XLVI, 45–49.)

Ratnakārāṅgaṇair yuktaṁ kukshi(r) āvṛita-lambitam ।
Toraṇasyopari-deśe tu bhujaṅga-pāda-dvayor api ।
Grāhāntaṁ sarva-ratnaiś cha pūritaṁ śreṇi-saṁyutam ।
(*ibid*, 58–60.)

But these arches may as well be quite plain, that is, without any such carvings (chitra-hīna)—(*ibid*, 68, 70.)

In connexion with a detached pavilion (maṇḍapa) :

Chatur-dikshu chatur-dvāraṁ chatus-toraṇa-saṁyutam ।
(*M.*, LXX, 21 : *see also* XXXIV, 217.)

In connexion with the pedestal of an image :

Padma-pīṭhaṁ mahā-pīṭhaṁ tri-mūrtīnāṁ cha yojayet ।
Prapā cha toraṇaṁ vāpi kalpa-vṛikshaṁ cha saṁyutam ।
(*M.*, LI, 86–87.)

In connexion with the coronation-hall :

Paśchāt siṁhādyaiś cha kalpa-vṛikshaṁ cha toraṇam ।
(*M.*, XLIX, 185.)

In connexion with the car or chariot :

Śikhi-śikhaṇḍaka-chāmara-toraṇam । (*M.*, XLIII, 156.)

In connexion with the two-storeyed buildings :

Toraṇair nīḍa-bhadrādi(-dyaiḥ) mūle chordhve cha bhūshitam ।
(*M.*, XX, 64.)

In connexion with buildings in general (vimāna) :

Śālā cha nāsikā-bhadre kuṭa-nīḍais tu toraṇaiḥ ।
(*M.*, XVIII, 201, etc.)

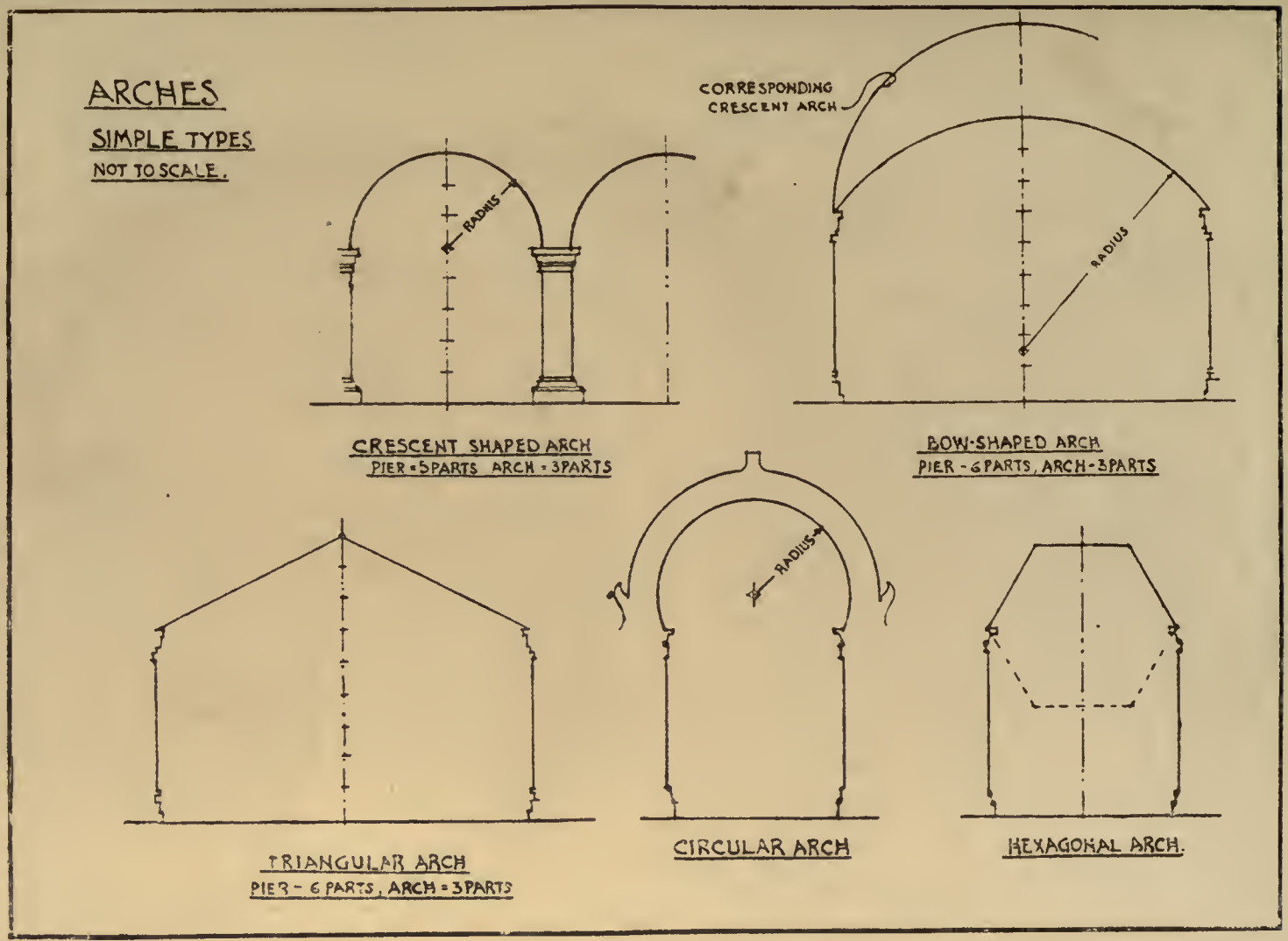
In connexion with the dome and the pillar :

Athavā toraṇaṁ kṛitvā stambhasyopari vājanam ।
Tad-ūdhve toraṇasyānte makara-patra-saṁyutam ।
Tad-ūrdhve toraṇāntaṁ syād eka-dandaṁ tu tach-chhiram ।
Makarī-vaktra-saṁyuktaṁ. . . .
(*M.*, XIV, 130, 133–135.)

(4) Tilaka-kshudra-nāsī-yukta-toranaiś cha samanvitam ॥
(*Kāmikāgama*, L, 93, etc.)

See ibid., LV, 59–63, 56–70, and compare :

Toraṇaṁ tri-vidhaṁ patra-toraṇaṁ makarānvitam ।
Chitra-toranaṁ ity-eshāṁ maṇḍanaṁ chādhunochyate ॥
Deva-dvija-narendrāṇāṁ toraṇaṁ makarākhyakam ।
Toraṅaṁ chitra-sajñaṁ tu vaiśyānāṁ pravidhīyate ।
Padmā(patrā)khya-toraṅaṁ śūdre sarvaṁ sarvatra vā matam ॥
(*Ibid*, LV, 64, 93.)


ARCHES
SIMPLE TYPES
NOT TO SCALE.
RADIUS
CRESCENT SHAPED ARCH
PIER = 5 PARTS ARCH = 3 PARTS
CORRESPONDING CRESCENT ARCH
RADIUS
BOW-SHAPED ARCH
PIER - 6 PARTS, ARCH - 3 PARTS
TRIANGULAR ARCH
PIER - 6 PARTS, ARCH = 3 PARTS
RADIUS
CIRCULAR ARCH
HEXAGONAL ARCH.

(5) . . . Toraṇaṁ vakshyate'dhunā ।
Prishṭhe tu pārśvayoś chaiva kartavyās toraṇās tathā ॥
Dvārasyotsedha-mānaṁ yat toraṇsyochchhrayaṁ bhavet ।
Tad-ardhaṁ vistaraṁ proktam uchchhrāye shad-vibhājite ॥
Makaraṁ tu dv(i)yaṁśena śeshaṁ pādam iti smṛitam ।
Mūla-pādasya ckārdhena tasya pāda-pramāṇakam ॥
Makarāṁśaṁ tad-ūrdhve tu madhye vṛittaṁ sa-nimnakam ।
Vṛitter ūrdhve uhāṁ kṛitvā ckatur-āyatam eva tu ॥
Pramāṇaṁ toraṇasyoktaṁ prastaraṁ cha tataḥ śṛiṇu ॥
(*Suprabhedāgama*, xxxi, 68–72.)

(6) *Mahābhārata* (Cock) :
XIV, 25, 23 : Stambhān kanaka-chitrāṁs cha toraṇāni vṛitanti cha ।
XIV, 85, 29 : Toraṇāni śata-kumbha-mayāni ।
XV, 5, 16 : Puraṁ. . . . dṛiḍha-prākāra-toraṇam ।
XII, 44, 8 : Hema-toraṇa-bhūshitaṁ gṛiham ।
VIII, 33, 19 : Bahu-prākāra-toraṇam ।
V, 191, 21 : Sthūṇa-bhavanam. . . . uchcha-prākāra-toraṇam
See also V, 143, 23 ; III, 284, 2 ; III, 160, 39 ; III, 15, 5 ; II ; 9, 1 ; II, 3, 26, 1, 185, 17 ; I, 109, 8, etc.

(7) *Rāmāyaṇa* (Cock) :
II, 91, 32 : Harmya-prāsāda-saṁyukta-toraṇāni ।
I, 5, 10 : Kapāṭa-toraṇa-vatīṁ. . . . purīm ।
II, 15, 32 : Rāma-veśma. . . . maṇi-vidruma-toraṇam ।
III, 45, 11 : Hema-kakshyā purī ramyā vaidurya-maya-toraṇā ।
V, 3, 33 : Nagarīṁ laṅkāṁ sāṭṭa-prākāra-toraṇam ।
V, 4, 24 : Gṛiham. . . . mahā-hāṭaka-toraṇam ।
See also IV, 33, 17 ; V, 2, 18, 51 ; V. 6, 4 ; V, 18, 8 ; V, 27, 31 ; V, 37, 39 ; V, 41, 21 ; V, 42, 27 ; V, 39, 42 ; V, 44, 6 ; V, 42, 6 ; V, 46, 20, 41 ; V, 47, 7, 38 ; V, 53, 39 ; V, 55, 32 ; VI, 25, 24, 30 ; VI, 26, 12 ; VI, 41, 31, 56 ; VI, 42, 15 ; VI, 75, 21 ; VII, 3, 27 ; VII, 5, 25 ; VII, 13, 5 ; VII, 14, 24, 27, 28, 29 ; VII, 15, 36 ; VII. 38. 17.

(8) *Matsya-Purāṇa* (Chap. CCLXIV, v. 15) :
Chaturbhis toraṇair yukto maṇḍapa(ḥ) syāch chatur-mukhaḥ ॥
The pavilion should have four faces and be furnished with four arched gateways (arches).
Aishṭakā dār(a)vāś chaiva śailā vā syuḥ sa-toraṇā ॥
(*Ibid.*, Chap. CCLXIX, v. 46.)

(9) *Vāyu-Purāṇa* (Part I, Chap. XXXIX, vv. 36, 51, 60) :
Harmya-prāsāda-kalilāḥ prāṁśu-prākāra-toraṇāḥ ॥
Aśītya-amara-pury-ābhā maker-prākāra-toraṇāḥ ॥
Pāṇdure chāru-śikhare mahā-prākāra-toraṇe ॥

(10) *Kauṭilīya-Artha-śāstra* (Chap. xxiv, p. 53) :

Dvi-hastaṁ toraṇa-śiraḥ—' a top-support of ornamental arches projecting as far as two cubits. '

(11) Sarva-deva-maya-chāru-toraṇaṁ svarga-khaṇḍam iva vedhasā svayam—' the beautiful porch which contains all the gods like a portion of heaven made by the Creator himself. '

' In his account of the ruins of the temple, Mr. Dean speaks of a doorway relieved by an architrave of most elaborate sculpture, divilded into twelve compartnents, in each of which a group from the Hindu Pantheon occupies a place. '

(Harsha Stone Inscrip., v. 44, *Ep. Ind.*, Vol. II, pp. 121, 126, 124, 128 ; *cf.* note 72.)

(12) A sort of triumphal arch, supported by two pillars :

Ātma-bāhu-yuga-sauhrid-aṁchita-stambha-saurabha-śubhaṁ su-toraṇaṁ—(Cintra Praśasti of the reign of Saranga-deva, v. 46, *Ep., Ind.*, Vol. I, pp. 284, 276.)

(13) *See* Śrīdhara's Devapattana prasasti (verse 10, *Ep. Ind.*, Vol. II, p. 440), and compare :

Sughaṭita-vṛisha-śata-toraṇa-dvāram—' an excellent porch at which a bull is skilfully carved. '—(*Ibid.*, v. 12, p. 121.)

(14) Ornamental arch (for the temple) : Prāsāda-toraṇam I

(Jaina Inscrip. from Mathura, no. 1, *Ep. Ind.*, Vol. II, p. 198.)

(15) A semi-circular arch with sculpture.

(Specimens of sculptures from Mathura, Plate III, *Ep. Ind.*, Vol. II, p. 320-321.)

(16) Makara-toraṇa—' arch with a shark.'

(*Raṅganātha Inscrip. of Sundarapandya*, v. 9, *Ep. Ind.*, Vol. III, pp. 12, 15.)

(17) Arch (Cochin plates of Bhaskara Ravivarman, line 10, *Ep. Ind.*, Vol. III, p. 68, 69).

(18) Vyadhatta śrī-someśāspada-mukuṭavat toraṇaṁ kāṁchanasya I

' Erected a golden toraṇa like a diadem for the abode of the holy Someśa. '

(The Chahamanas of Naddula, no. c, Sundhā Hill Inscrip. of Chāchigadeva v. 34, *Ep. Ind.*, Vol. IX, pp. 77, 72.)

(19) ' In front of the basadi of nokkijabbe, the family goddess of her husband Vira-Śāntara, she had a makara-toraṇa made. '—(*Ep. Carnat.*, Vol. VIII, Part I, Nagar Taluq, no. 47 , Transl., p. 151, para. 2.)

(20) ' We grant to you in addition throne, crown palanquin, white umbrella, chāmaras on both sides, makara-toraṇa (a kind of arched canopy), fan, day-light torch, yellow and red flags and such insignia, with cymbals, . . .'—(*Ibid.*, no. 67, Transl., p. 157, line 14 f.)

(21) ' Who (Śri-Rājendra-Sola-Devar, A. D. 1034)—having sent (many ships in the midst of the bellowing sea) and having captured Śangirāma-viśaiyot-tuṅgapannam, the king of Kidāram, along with his victorious fine elephants which had (well formed) frontal globes and resembled the impetuous sea—took the large heap of treasure which he had rightfully amassed, the Vichchādira-toraṇam at the war-gate of the enemy's extensive city, the wicket-door set with jewels of great splendour, and the door set with large jewels.'—(*Ep. Carnat.*, Vol. IX, Channapatna Taluq, nos. 82, 83 ; Roman Text, p. 185, line 5 from the bottom upwards ; Transl., 149.)

(22) ' White chāmaras, the crown banner, makara-toraṇa, herds of camels.'—(*Ibid.* no. 85; Transl., p. 150.)

(23) ' Built a beautiful stone temple with the toraṇa-gate and the surroundings walls. Having provided the temple with a flower-garden, kitchen, pond, suitable environs, musical instrument (two named) and ornaments (some named) . . . '—(*Ep. Carnat.*, Vol. X, Kolar Taluq, no. 132 ; Roman text, p. 54 ; Transl., p. 49.)

(24) Svarṇa-dvāraṁ sthāpitaṁ toraṇena sārddhaṁ Śrimal-Lokanāthasya gehe ।

' Placed a golden door and toraṇa in the temple of glorious Lokanātha.'

The inscription is ' on the lintel of the door of the temple of Avalokiteśvara in Bungmatī. The door is made of gilt brass plates, and adorned by relieves. The arch or toraṇa above the door, which is likewise made of brass, encloses three images of Lokeśvara.'

(Inscrip. from Nepal, no. 21, Inscrip. of Srinivasa, line 6 f., *Ind., Ant.*, Vol. IX, p. 192, note 62.)

(25) Suganaṁ raje . . . Dhanabhūtina kāritaṁ toraṇaṁ silākaṁmaṁta cha upaṁno (=Śuṇgānāṁ rājye . . . Dhanabhūtinā kāritaṁ toraṇaṁ śilākarmāntaś chotpannaḥ) ।

' During the reign of the Sungas (first or second century B. C.) this gateway was erected, and the masonry finished by Vāchhi-puta (Vātsī-putra) Dhanabhūti.'

(Sunga Inscrip. of the Bharhut Stupa, line 3 f., *Ind. Ant.*, Vol. XIV, pp. 138, 139 ; no. 1, Vol. XXI, p. 227.)

(26) ' Pulling down the temple which had fallen to ruin, had it securely rebuilt with a gopura, a makara-toraṇa for the god Durgīśvara, and god Vṛishabha.'—(*Ep. Carnat.*, Vol. III, Tirumakūḍlu-Narasīpūr Taluq, no. 103 : Transl., p. 88 ; Roman Text, p. 170.)

(27) 'The sculptor Kālidāsi, champion over the proud, a thunderbolt to the rock (vajra-giri), titled sculptor, made the makara-toraṇa (or carved headpiece for the lintel).'—(*Ep. Carnat.*, Vol. v, part I, Supplement, Belur Taluq, no. 239; Transl., p. 275; Roman Text, p. 592.)

(28) 'Those Brāhmaṇs, pleased with Bāsi-Sèṭṭi, gave to his wife and children a large palanquin and a canopy (toraṇa) to descend to his children.'—(*Ep. Carnat.*, Vol. vi, Chikmagalūr Taluq, no. 44; Transl., p. 39; Roman Text, p. 104.)

(29) 'The Vīra-bhikshavati-udāna-svāmi honoured the Svāmi of the Gālipuje throne with the follwing: a palanquin with silver mountings, a pearl necklace, a golden umbrella, the double chāmaras, a makara (toraṇa) canopy . . . for the feet, a Mukkanna drum, a Basava drum, a Nandi flag, etc.'—(*Ep. Carnat.*, Vol. vi, Chikmagalūr Taluq, no. 109; Transl., p. 51, para 2; Roman Text, p. 124, line 8 f.)

(30) 'Toran(a)—A structure formed of one or more horizontal beams resting on columns: a gateway or other detached entrance.'—(Rea, Chālukyān Architecture, *Arch. Surv.*, New Imp. Series, Vol. xxi, p. 40.)

(31) *See* Cunningham, *Arch. Surv. Reports* (Vol. xxi, Plate xl, Toraṇa of great temple, Nānd-Chānd).

(32) 'Toraṇa—(1) Gate-way of a temple or Stūpa, (2) a peg used in marriage ceremonies.'—(Vincent Smith, Gloss. to Cunningham's *Arch. Surv. Reports.*)

TAULI—The top of a building, a roof, the ceiling.

Mukhottarāyate nyasya tiryak taulim prakalpayet।
Padaṁ vāyate taulim kuryād yuktyā vichakshaṇaḥ।
Tad-ūrdhve jayantikaṁ kuryāt tat-tat-prachchhādanānvitam।

(*M.*, xxxiii, 372-374.)

See Prachchhādana and compare Pratauli.

TRI-KARṆA—A kind of joinery, of three-earn pattern.

(*M.*, xvii, 106; *see* under Sandhi-karman.)

TRI-TĀLA—The second floor, the third storey.

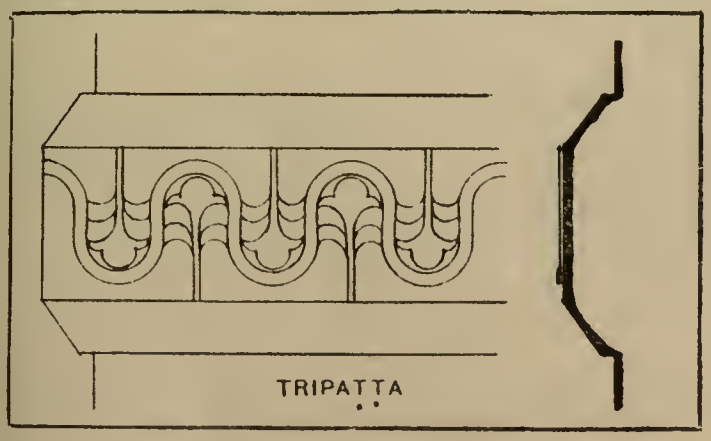
The description of the third storey.—(*M.*, xxi, 56-72; the eight classes, 2-55; *see* under Prāsāda.)

TRI-PAṬṬA—A three-fold band, a moulding.

A moulding of the vase.—(*M.*, xiv, 74, 143, 248, etc.; compare the lists of mouldings under Adhishṭhāna.)

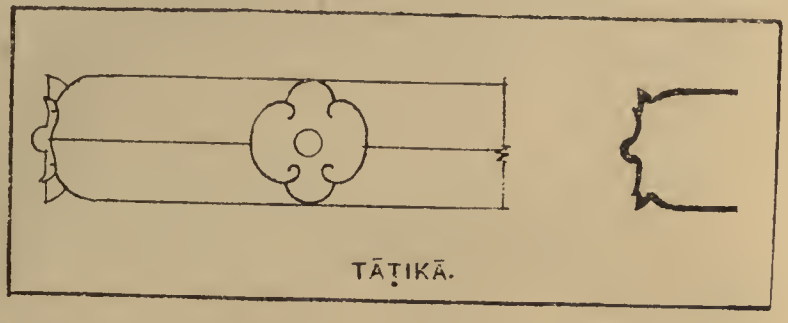
TRI-BHAṄGA (*see* Bhaṅga)—A pose in which the image is bent in three places. In this pose a figure has its head and hips displaced about one *aṁśa* (part) to the right or left of the centie line.

(*See* details under Bhaṅoa.)



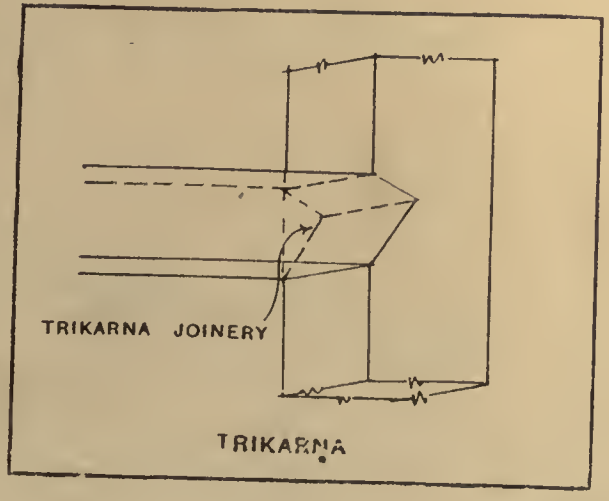
TRIPATTA

TARANGA.



TĀṬIKĀ.

TRIBHANGA.



TRIKARNA

TRI-BHITT-(IKA)—A three-fold wall, a structure having such a wall.

(*M.*, XXXIV, 74.)

TRI-BHŪMI (*see* TRI-TĀLA)—The third storey, a three-storeyed building.

In connexion with an image :

Evaṁ tu Vishṇu-mūrtiḥ syāch chhakti-yuktaṁ tu pārśvayoḥ ।
Tri-bhūmirdakshiṇe vāme sthāvare jaṅgame'pivā ।

(*M.*, LI, 62-63.)

TRI-MŪRTI—The triad, the images of Brahmā, Vishṇu and Śiva.

(*M.*, LI, 2-95.)

TRI-YUTA—A site plan in which the whole area is divided into 289 equal squares.

(*M.*, VII, 23 ; *see* under PADA-VINYĀSA.)

TRI-VARGAKA—A set of three architectural members or mouldings.

Pīnopapīṭhaṁ harmyaṁ cheva maṇḍapaṁ cha tri-vargakam ।

(*M.*, XXXIV, 68.)

Nanda-paṅkty-aṁśa(-śe) vibhajet chatus-tale tu tri-vargakam ।

(*M.*, XXXIII, 505.)

In connexion with the foundations :

Mañjūshochchrayaṁ chatur-bhāgaṁ tat-tad ekāsanaṁ bhavet ।
Tad-dvayaṁ chāṅghri-tuṅgaṁ syād ekāṁśaṁ prastarānvitam ।
Tri-varga-maṇḍapākāram adbhiḥ svāntaṁ pravishṭake ।

(*M.*, XII, 34-36.)

TRI-VISHṬAPA—A class of buildings, octangular in plan and called (1) Vajra, (2) Chakra, (3) Svastika, (4) Vajra-svastika, (5) Chitra, (6) Svastika-khaḍga, (7) Gadā, (8) Śrikaṇṭha, and (9) Vijaya.

(1) *Agni-Purāṇa*—(Chap. CIV, vv. 12, 20-21 ; *see* under PRĀSĀDA).

(2) *Garuḍa-Purāṇa*—(Chap. XLVII, vv. 21, 22, 23, 31-32 ; *see* under PRĀSĀDA.)

TVASHṬṚI—An architect (*see* details under STHAPATI).

D

DAṆḌA(-MĀNA)—A measure, a type of building, a flag-staff, a pillar, a parapet (*M.*, XVI, 194-196).

(1) A measure of four cubits (*see* under AṄGULA) :

Chatur-hastaṁ dhanur daṇḍaṁ daṇḍāshṭaṁ rajjum eva cha ।

(*M.*, II, 53.)

Compare hasta-daṇḍa (*M.*, II, 68), māna-daṇḍa (*ibid.*, 76).

A stick (*M.*, II, 223), a measure (*M.*, IX, 10, etc.) ; in connexion with joinery (*M.*, XVII, 200).

(2) A house with a northern and eastern hall (*see* DAṆḌA-KĀNTA).

(*Bṛihat-Saṁhitā*, LIII, 39.)

(3) Chatur-hasto dhanur daṇḍo nālika-jugam eva cha ।

(*Brahmāṇḍa-Purāṇa*, Part I, 2nd Anushaṅga-pāda, Chap. VII, v. 100.)

(4) A class of buildings.—(*Kāmikāgama*, XLV, 64 ; *see* under MĀLIKĀ.)

(5) Achaleśa-daṁḍam uchchaiḥ sauvarṇṇaṁ Samara-bhūpālaḥ Kārayāmāsa ।

'The protector of the earth, Samara, caused a golden flagstaff to be erected here (in the temple at Abu) for the lord of the mountain.'

(Mount Abu Inscrip. of Samarasiṁha v. 54, *Ind. Ant.*, Vol. XVI, pp. 350, 355.

(6) Daṇḍa—'an unspecified measure, also called Stambha.'—Bamani Inscrip. of the Silahara Vijayaditya, lines 20, 21, 23, *Ep. Ind.*, Vol. III, pp. 212, 213.)

DAṆḌAKA—A pillar, a village, a pavilion, a hall, a moulding.

(1) A part of a column.

(*Suprabhedāgama*, XXX, 586, etc.; *see* under STAMBHA.)

(2) *Mānasāra :*

A class of villages (*M.*, IX, 2, etc.; *see* under GRĀMA).

A part (? shaft) of the column (*M.*, XV, 44, 149 ; L, 85).

A small pillar (*M.*, XVIII, 172).

type of pavilion with two faces :

Dvi-vaktraṁ daṇḍakaṁ proktaṁ tri-vaktraṁ svastikaṁ tathā ।

(*M.*, XXXIV, 552 ; *see* further context under MAṆḌAPA.)

A class of halls or storeyed mansions built in a single row—(*M.*, XXXV, 3, description *ibid*, 65–66, 82–95, *see* under ŚĀLA.)

DAṆḌA-KĀNTA—A class of halls, a type of storeyed mansions.

(*M.*, XXXV, 104 ; *see* DAṆḌAKA.)

DAṆḌIKĀ—The fifth moulding from the top of the entablature.

(*Kāmikāgama*, LIV, 2 ; *see* under PRASTARA.)

DAṆḌITA—Smaller buildings, pavilions near the door.

Cf. Dvāra-mānaṁ tathaivaṁ syāt daṇḍita-dvāram ardhataḥ ।

(*Ibid.*, XXXV, 45, etc.)

DANTA-KĪLA—A kind of tooth-like joinery.

(*M.*, XVII, 177 ; *see* SANDHI-KARMAN.)

DANTA-NĀLA—A tooth-like drain or canal.

In connexion with the general description of the single-storeyed buildings :

Madhyame chottame harmye danta-nālaṁ pramāṇakam ।

(*M.*, XIX, 168.)

DAM(A) (*see* DHĀMAN)—A house.

(*R.-V.*, I, 1, 8 ; II, 1, 2 ; *Vj. Sam.* VIII 24, etc.)

DARI-GṚIHA (*see* KANDARA-GṚIHA)—The cave-house generally hewn out of rocks, underground rooms.

See Kālidāsa's *Kumārasambhava* (I, 10, 14 ; quoted also by Professor Lüder) *Ind. Ant.*, Vol. XXXIV, p. 199.)

DARPAṆA—A looking-glass, a mirror, an ornament.

In connexion with the single-storeyed buildings :

Pālike lambanaṁ tatra śreṇyā darpaṇa(ṁ) proktavat ।—(*M.*, XIX, 42.

In connexion with the car or chariot :

Rathānāṁ chordva-deśasya alaṅkāraṁ pravakshyate ।
Vividha-kiṅkini-nirmala-darpaṇam. . . . ।—(*M*, XLIII, 148, 157.)

An article of furniture (*M.*, L, 46), its description (*ibid.*, 111–131).

DARBHA—A type of pavilion, used as stables for elephants.

(*M.*, XXXIV, 253 ; *see* under MAṆḌAPA.)

DALA—A petal, a leaf, a moulding of leaf-pattern.

A moulding of the pedestal (*M.*, XIII, 75, 82, etc.; *see* the lists of mouldings under UPAPĪṬHA).

A moulding of the throne (*M.*, XLV, 160, etc.).

DAŚA-KANTA—A collective name of the ten classes of twelve-storeyed buildings.

(*M.*, XXX, 7.)

DAŚA-TALA—The tenth storey, the ten-storeyed buildings.

Etad daśa-talaṁ proktaṁ rajju-sūtram adhas-talam ।

(*Kāmikāgama*, XXXV, 85.)

The description of the tenth storey (*M.*, XXVIII, 20–40), six classes (*ibids.* 2–18 ; *see* under PRĀSĀDA).

DAŚA-TĀLA—A sculptural measure (*see* under TĀLA-MĀNA).

See Aṁśumadbheda of Kāśyapa (*MS.* Egg. 3148, 3012, fol. 266, the largest type of the daśa-tāla measure ; and fol. 274, the smallest type of the same.)

DAŚA-BHŪMI (*see* DAŚA-TĀLA)—The tenth storey, the ninth floor.

DĀGABA—A Singalese word applied to a stūpa, derived from Sanskrit 'dhātu,' a relic, element, and garbha, a womb, receptacle, or shrine.

See further details under DHĀTUGARBHA, *cf.* Vinaya Texts, 4, 308. They were pre-Buddhistic in origin, *see White Yajurvéda*, Chap. XXXV.

DĪPA-DAṆḌA—A lamp-post, a lamp-bearing pillar.

Compare Dīpa-stambha, and Dīpa-skambha under STAMBHA and *see* the plates referred to.

The stationary lamp-post is generally built in front of the house (*M.*, L. 64) ; the movable lamp-stand is square, octagonal or circular (*ibid.*, 84) ; they are made of iron, wood, or stone (*ibid.*, 71–89) ; their description in detail (*ibid.*, 57–83, 84, 96).

DĪPA-DĀNA—A lamp-pillar. In the south (of India) it is usually a high monolith, with an iron lamp-bracket on the top. In the north-west of the Presidency of Madras such pillars are sometimes constructed in courses, with lamp-brackets in the joints. These pillars are erected outside the front entrance.

(Chālukyān Architecture, p. 38, *Arch. Surv.*, New Imp. Series, Vol. XXI ; *see* Plate CIX, fig. 1.)

DĪPA-MĀLA(-SKAMBHA, DĪPA-STAMBHA, DĪPTI-STAMBHA) (*see* STAMBHA)—A lamp-bearing pillar, generally belonging to the Jain monuments.

A small lamp-pillar, standing inside the temple (Chālukyān Architecture, p. 38, *Arch. Surv.*, New Imp. Series, Vol. XXI ; *see* Plate CIX, fig. 1).

DUNDUBHI—A type of round buildings.

(1) *Agni-Purāṇa* (Chap. CIV, VV. 17–18 ; *see* under PRĀSĀDA).

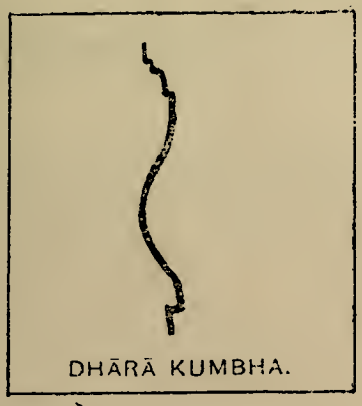
(2) *Garuḍa-Purāṇa* (Chap. XLVII, VV. 21, 23, 28, 29, *see* under PRĀSĀDA).

DURGA—*Lit.* 'difficult to go' into, hence a fortified place, a fort, a fortified city.

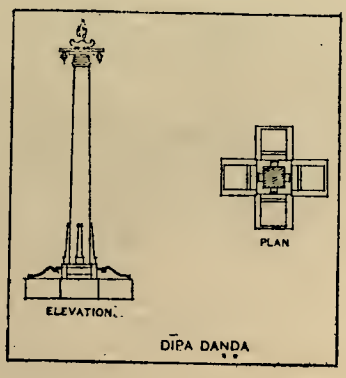
(1) *Mānasāra*:

As fortified cities, the forts are called śibira, vāhinī-mukha, sthānīya, droṇaka, saṁbidhha, kolaka, nigama and skandhāvāra.

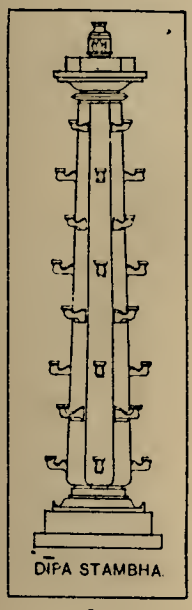
(*M.*, X, 40–42.)



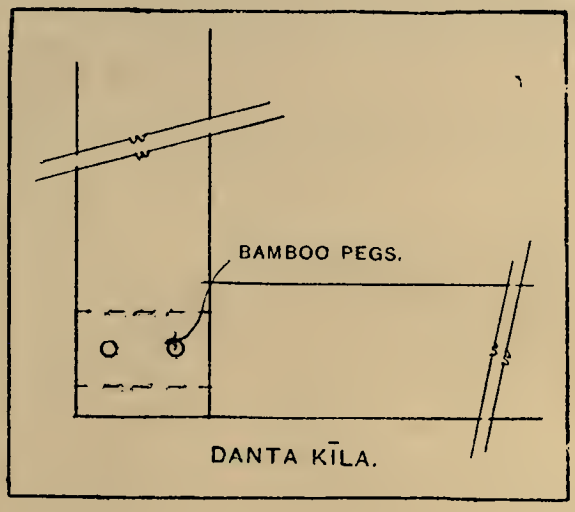
DHĀRĀ KUMBHA.



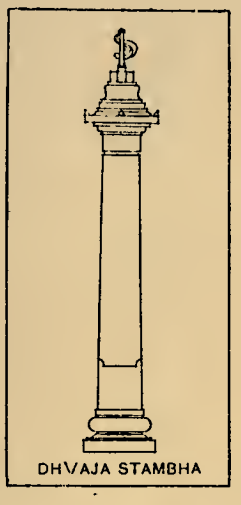
DĪPA DANDA



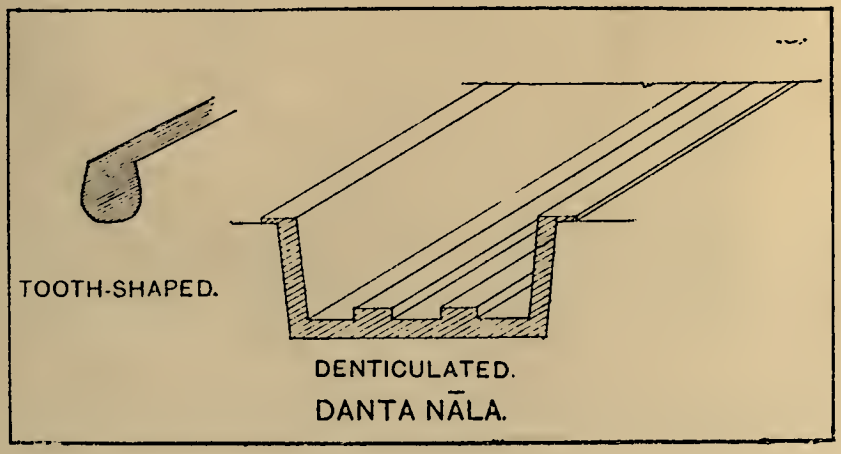
DĪPA STAMBHA.



DANTA KĪLA.



DHVAJA STAMBHA



DANTA NĀLA.

For purely military purposes, they are classified as giri-durga (hill-fort), vana-druga (forest-fort), salila-durga (water-fort), paṅka-durga (clay-fort), ratha-durga (chariot-fort), deva-durga (divine-fort), and miśra-durga (mixed fort) (*M.*, x, 90-91). Their description in detail is given (*ibid.*, 90-103).

Their common features :

Sarveshām api durgāṇāṁ vapraiś cha parikhair vṛitam ।
Praveśa-nirgama-sthāne dvārair api samanvitam ।
Ishṭakādi-kṛitaṁ vapraṁ hasta-dvādaśakochchhrayam ।
Tad-ardhaṁ bhitti-mūle tu saṁchāraiḥ saha vistṛitam ।

(*M.*, x. 106–109.)

(2) *Kauṭilīya-Artha-śāstra* (Chap. XXIV, para 1, p. 51):

Chatur-diśaṁ jana-padānte sāmparāyikaṁ daiva-kṛitaṁ durgaṁ kārayat antar-dvīpaṁ sthalaṁ vā nimnāvaruddham audakaṁ prāstaraṁ guhāṁ vā pārvataṁ nirudaka-stambam-iriṇaṁ vā dhānvanaṁ kha-janodakaṁ stamba-gahanaṁ vā vana-durgam ।

Teshāṁ nadi-parvata-durgaṁ jan-padāraksha-sthānaṁ dhān-vana-vana-durgaṁ atavī-sthānam āpādya prasāro vā ।

Then follows the very interesting description of the plan and other architectural details, the military defences, and interna arrangement for the comfort and convenience of the inhabitants.

The contents of Chapters XXIV, XXV, and XXII, when taken together, will give a good idea of the ancient fortified cities :

They can be circular, square or rectangular. They are surrounded with moats (parikhā), enclosure walls and ramparts (prākāra and vapra), and are furnished with various entrances, exits and gateways (pratolī). Circumambulating flights of steps (pradakshiṇa-sopāna) and secret staircases in the walls (guḍha bhitti-sopāna) are constructed. Towers are built on the enclosure walls and warlike weapons are placed therein. In the interior are constructed tanks, ponds, canals, etc. Various kinds of roads are constructed, and buildings for the people of different castes and professions are erected in a suitable manner.

(3) *Śukranīti* (Chap. IV. sect. vi, vv. 2–16, 23–28, ed. Jīvānanda Vidyā sāgara, p. 447 f.)

'Fortresses are made inaccessible through ditches, thorns, rocks and deserts. The *Parikhā* fort is that which is surrounded on all sides by great ditches (parikhā); and the *Parigha* fort is known to be that which is protected by walls of bricks, stones and mud.

The *Vana* or forest-fort is one which is encircled by huge thorns and clusters of trees. The *Dhanva-durga* is known to be that round about which there is no water. The *Jala-durga* or water-fort is that which is surrounded by great sheets of water. The *Giri-durga* or hill-fort is described as that one which is on the high level and is supplied with plenty of water. The *Sainya-durga* or troop-fort is that one which is defended by heroes well up in vyuhas or military defence and hence impregnable. The *Sahāya-durga* or help-fort is known to be that which belongs to valorous and friendly kinsfolk.'

(4) Laṅkāpurī nirālambā deva-durga-bhayāvahā ।
Nādeyaṁ pārvataṁ vanyaṁ kṛitrimaṁ cha chatur-vidham ॥
Śailāgre rachita-durgā sā pūr deva-puropamā ।

(*Rāmāyaṇa*, Laṅkākāṇḍa, Sarga 3, vv. 20, 22.)

(5) Kheṭānāṁ cha purāṇāṁ cha grāmāṇāṁ chaiva sarvaśaḥ ।
Tri-vidhānāṁ cha durgāṇāṁ pārvatodaka-dhanvinām ॥

(*Brahmāṇḍa-Purāṇa*, Part 1, 2nd Anushaṅga-pāda, Chap. VII, v. 105 ; *see also* v. 102.)

(6) Dhanur-durga-mahī-durgam ab-durgaṁ vārkshaṁ eva vā ।
Nṛi-durgaṁ giri-durgaṁ vā samāśritya vaset puram ॥

(*Manu-Saṁhitā*, VII, 70, etc.)

(7) Shaḍ-vidhaṁ durgam āsthāya purāṇy-atha niveśayet ।
Sarva-saṁpat-pradhānaṁ yad bāhulyaṁ chāpi saṁbhavet ॥
Dhanva-durgaṁ mahī-durgaṁ giri-durgaṁ tathaiva cha ।
Manushya-durgaṁ mṛid-durgaṁ vana-durgaṁ cha tāni shaṭ ॥

Then follows the description of details of these fortified places.

(*Mahābhārata*, XII, 86, 4–5, etc.)

(8) Yo'yaṁ samastam api maṇḍalam āśu śatror āchchhidya kirtti-giri-durgam idaṁ vyādhatta—'having quickly wrested from the enemy this whole district (maṇḍala) made this fort of Kīrtigiri.'—(Chandella Inscrip. no. B, Deogaṭṭha rock Inscrip. of Kirtivarman, v. 6, *Ind. Ant.*, Vol. XVIII, pp. 238, 239.)

(9) Lakshmī-nṛisiṁha-paripālita-pūrva-tishṭe durge su-bhīma-parighe Maḷavaḷḷi-nāmni ।
Vedāntagaiḥ śrutiparaiḥ smṛiti-dharma-vidyaiḥ pūrṇe sma kārayati deva-nṛipas-saro'gryam ॥

'In the fort named Maḷavaḷḷi, protected on the east by (the temple of) Lakshmī-Nṛisiṁha, having a deep moat, filled with men learned in the Vedānta (i.e., philosophy), Śruti (Vedas), Smṛiti and Dharma-śāstra that Deva-nṛipati made a maginificent pond.'

Evidently this 'durga' or fort is not a military post or station; its inmates are people learned not in the military science but in philosophy and religion. At the same time it is protected by 'deep moat.' It is, therefore, just like the villages or towns described in the *Mānasāra.*

(*Ep. Carnat.*, Vol. III, Malavalli Taluq no. 61; Roman Text, last verse, p. 126; Transl., p. 62.)

(10) *See* the fort-temple.

(Chālukyān Architecture, *Arch. Surv.*, New Imp. Series, Vol. XXI, Plate CXIV, figs. 1, 2.)

DURYA—Door-posts, belonging to doors, dwellings.

(*R.-V.*, I, 9, 18; 2, 12; VII, I, 11; 1, 91, 19; X, 40, 12; *Taitt. Sam.*, I, 6, 3, 1; *Vāj. Sam.*, I, 11.)

DURLABHA-GRĀMA—A village situated close to a large village (mahā-grāma) and inhabited by the free-holders (agrahāropajīvin).

(*M.*, X, 79-80; *see* under GRĀMA.)

DEVA-KĀNTA—A class of the eight-storeyed buildings.

(*M.*, XXVI, 46-47; *see* under PRĀSĀDA.)

DEVA-KULA(-IKĀ)—A chapel, a shrine, a temple, a statue shrine, a statue gallery.

(1) 'Kandaśeṇaṇ (Skandasena) . . . caused (this) temple (deva-kula) to be made.'—(Vallam Inscip. of Mahendrapotaraja, no. 72, A. B; *H. S. I. I.*, Vol. II, p. 341.)

(2) *See* inscriptions from Northern Gujarat (no. XXI, line 4, *Ep. Ind.*, Vol. II, p. 31.)

(3) *See* the inscription of the Samvat 168 in Sarada character at Peshwar Museum.

(4) Compare statue gallery of Ikshvaku Kings described in the Pratimā Nāṭaka of Bhāsa, and Kushan Kings Vamatakeshma and Kanishka and the Saka Satrap Chastana excavated in a mound near Mathura and preserved in the Mathura Museum.

DEVA-GARBHA—Foundations of temples (*see* under GARBHA-NYĀSA).

DEVATĀ-MAṆḌAPA—A class of pavilions.

(*Suprabhedāgama*, XXXI, 96, 98; *see* under MAṆḌAPA.)

DEVA-DURGA (*see* DURGA)—A god's fort, a divine or natural fort.

'Having sacked deva-durga, which formerly the Chola King (or the Chola named Narendra) had made certain could not be taken, he by his valour captured Uchchaṅgi, together with all the empire of the Pandya King.'—(*Ep. Carnat.*, Vol. v, Part 1; Belur Taluq, no. 119; Transl., p. 78; Roman Text, pp. 182–183.)

DEVA-NIKETA-MAṆḌALA—A group of temples.

Achīkarad deva-niketa-maṇḍalam . . . stambha-varo-chchhraya-prabhāse—'caused to be made a group of temples . . . which is beautiful with the erection of (this) best of columns.'—(Bihar Stone Pillar Inscrip. of Skandagupta, lines 5–6, *C.I.I.*, Vol. III, F. G. I. no. 12, pp. 49, 51.)

DEVA-BHŪSHAṆA-MAṆḌAPA—A detached pavilion where the idols are dressed, a dressing room in a temple.

(*M.*, XXXII, 71; *see* under MAṆḌAPA.)

DEVĀYATANA (*see* ĀYATANA)—A temple.

Kritvā prabhūtaṁ salilam ārāmān viniveśya cha।
Devāyatanaṁ kuryād yaśo-dharmābhivṛiddhaye ॥

'Having made great water reservoirs and laid out gardens, let one build a temple to heighten one's reputation and merit.'

(*Bṛihat-Saṁhitā*, LVI, 1 : *J. R. A. S.*, N. S Vol. VI, p. 316.)

Rāmāyaṇa (Cock):

I. 5, 13 : (Purīm) . . . devāyatanaiś chaiva vimānair api-śobhitām।
I. 77, 13 : Devāyatanāni।
II. 6, 4 : Śrīmaty-āyatane vishṇoḥ।
II. 6, 11 : Sitābhra-śikhārābheshu devāyataneshu।
II. 3, 18 : Devāyatana-chaityeshu (also II, 71, 72).
II. 25, 4 : Deveshv-āyataneshu cha।
VII. 101, 15 : (Ubhe purottame) . . . śobhite śobhanīyaiś cha devāyatana-vistaraiḥ।
Devāyatana-chaityeshu।—(*Mahābhārata*, II, 80, 30, etc.)

Cf. Grāma-nagara-kheḍa-karvvaḍa-maḍaṁba-droṇa-mukha-pattaṇaṁ gaḷiṁdam aneka-māṭa-kuṭa-prāsāda-devāyatanaṁgaḷidaṁ-oppuva-agrahāra-paṭṭanaṁgaḷiṁdam atiśayav-appa . . . ।

[At Teridala, a merchant-town situated in the centre and the first in importance among the twelve (towns) in the glorious Kundi Three-Thousand, adorned with]—'villages towns, hamlets, villages surrounded by hills, groups of villages, sea-girt towns, and chief cities

with elegant mansions, palaces and temples, and with shining agrahāra towns in the country of Kuntala . . .'

(Old Kanarese Inscrip. at Terdal, line 58 ; *Ind. Ant.*, Vol. XIV, pp. 19, 25.)

DEVĀLAYA—A god's residence or dwelling, in the sense of temple it is of very common occurrence and needs no illustrative quotations. But the passages quoted below are the most descriptive of all the essential features of a Hindu temple and will fully explain the denotation of the term.

The general plan :

(1) ' Sometimes a portico is made round the garbha-gṛiha (shrine and antarāla (corridor) together. The whole being closed on all sides but the front, in which are the doors for entrance, approached by the front portico, which is generally a peristyle, and it serves as the innermost court for pradakashiṇa (circumambulation).'

' Temples on a large scale have three or four successive porticoes (maṇḍapa) attached to them in the front, which are called ardha-maṇḍapa, mahā-maṇḍapa, sthāpana-maṇḍapa, vṛitya maṇḍapa, etc. '

' A water spout is made over the base on the back wall of the garbha-gṛiha on the left side of the idol. On the surface of the spout a cavity is made for discharging water. The spout may be made to spring from the head of a lion, etc. and the whole so devised as to project like a plantain flower.'

(Rām Rāz, *Ess. Arch. of Hind.*, pp. 49, 50, 51.)

(2) ' Kṛishṇarāja-uḍayar, having created Chāmarāja-nagara, created the Chāmarājeśvara temple (devālaya), together with its precincts (prākāra), gopura (gateway) adorned with golden kalaśas and tower (vimāna),—set up the great (mahā) liṅga under the name of Chāmarājeśvara, and in the shrine (garbha-gṛiha) to his left set up the goddess named Kempa-Nañjamāba, and in the shrine to his right the goddess Chāmuṇḍeśvarī,—and at the main entrance (mahādvāra) on the east set up a gopura, on the colonnade (kaisāleyalli), to the south the ancient images (purātana-vigraha), on the colonnade to the west a row of liṅgas forming the thousand (sahasra) liṅgas and on the colonnade to the north twenty-five pleasing statues (lilāmūrti, *cf.* dhyāna-mūrti)—and on the south-west side building a separate temple (maṇḍapa), set up the god Nārāyaṇa together with Lakshmī.'—(*Ep. Carnat.*, Vol. IV, Chāmarāj-nagar Taluq, no. 86 ; Transl., p. 11, line 4 f. ; Roman Text, p. 18, line 8 f.)

(3 ' In Lakkuguṇḍi, which was his birth-place, Amṛitadaṇḍādhīśa built a temple (devālaya), made a large tank, established a satra, formed an agrahāra, and set up a water-shed. '—(*Ep. Carnat.*, Vol. VI, Kadur Taluq, no. 36 ; Roman Text, p. 22, line 11 f. ; Transl., p. 8.)

(4) Devālayaiḥ prathayatā nija-kīrttim uchchaiḥ—' who spread his fame aloft by (building) temple.'—(*Sharqi Arch. of Jaunpur*, Shahet-Mahet Inscrip., v. 14, *Arch. Surv.*, New Imp. Series, Vol. XI, pp. 72, 73.)

The general plan :

(5) ' The temple itself consists of the usual three parts : an open maṇḍapa on a base, ... with a double row of pillars on the three exposed sides, and roofed by a large ribbed dome standing on the twelve inner pillars ; on each of the three outer sides it has a large projecting porch. Beyond this is the principal maṇḍapa . . . in the inner corner of this maṇḍapa are two rooms. . . . Three doors with richly carved thresholds lead from the hall into the shrine. '—(Ahmedabad Arch., Burgess, *Arch. Surv.*, New Imp. Series, Vol. XXXIII, p. 29.)

(6) ' It (the Malleśvara temple at Hulikat) faces north and consists of a garbha-gṛiha, an open sukha-nāsi a nava-raṅga and a porch.'

' The Chennekeśava temple, which faces east, consists of a garbha-gṛiha, a sukha-nāsi and a nava-raṅga, and may have had a porch once. '

' The newly restored Śāradā temple, situated to the north of the Vindya-śaṅkara, is a fine structure in the Dravidian style consisting of a garbha-gṛiha, sukha-nāsi, a nava-raṅga, and a prākāra or enclosure. It faces east and has three entrances on the north, south, and east, the east entrance, which is the main entrance, having two open maṇḍapas at the sides inside.'

(*Mysore Arch. Reports*, 1915–16, p. 4, para. 10 ; p. 5, para. 12 ; p. 15, para. 19 ; *see* Plate III, figs. 1, 2.)

(7) ' There is, however, no doubt that it (the Hindu temple at Danui) was in the form of a cross with the usual ardha-maṇḍapa, maṇḍapa, mahā-maṇḍapa, antarāla, and gṛiha-garbha (garbha-gṛiha).'

(Cunningham, *Arch. Surv. Reports*, Vol. VII, p. 40 : *see also ibid.*, plate, XIX, showing in detail the mouldings of the Nārāyaṇa-pura temple, *ibid.*, Vol. XIV, Plate VII, Ionic temple of sun, *ibid.*, Vol. XV, Plate VII, island temple, *ibid.*, Vol. XIII, Plates XI, XII, XIII, XIV, XV, XVI, groups of temples.)

DEŚYA—A site plan of one hundred and forty-four squares.

(*M.* VII, 13, 14 ; *see* PADA-VINYĀSA.)

DEHARĪ(-LĪ)—A temple, the threshold of a door, a raised terrace.

(*See* inscriptions from Northern Gujarat nos. XXII, line 3 ; XXXIII, line 2 XXIV, line 1 ; XXV, line 2 ; *Ep. Ind.*, Vol. II, p. 32.)

DEHI—A defensive wall, trench or rampart.

(*R.-V.*, VI, 47, 2 ; VII, 6, 5, Schroder *Pre-historic* : *Antiquities*, 344 ; Zimner, All. Lib., 143, as in the names Videha or even Delhi.)

DEHA-LABDHĀṄGULA (*see* under AṄGULA)—A measure equal to one of the equal parts into which the whole height of the statue of a god (or of the master and sometimes of the sculptor too) is divided according to the tāla measures. This is employed in measuring the sculptural objects like the image of a god or man.

(*Suprabhedāgama*, XXX, 5, 6, 9 ; *see* under AṄGULA.)

DEHĀRA—A porch, a terrace.

(1) 'In a discourse on dharmma in an assembly held in the porch or terrace (dehāra), the chaplain . . . set up a god in the name of their father.'—(*Ep. Carnat.*, Vol. v, Part I, Arsikere Taluq, no. 123 ; Transl., p. 167, para. 2, line 4.)

(2) 'From Vīra-Hoysala he obtained (the appointment) of inspector of the servants of the porch or terrace (dehāra).'—(*Ibid.*, no. 127, Transl., p. 170, para. 2, line 16.)

DAIVIKA-(LIṄGA)—A type of phallus, a phallus of divine origin.

Devaiś cha sthāpitaṁ liṅgaṁ daivikaṁ liṅgam uchyate ।

(*M.*, LII, 230. *See Kāmikāgama* L, 35, 37, under LIṄGA.)

DOLĀ—A swing, a hammock.

'The great minister caused to be erected a dīpti-stambha for the Kṛittikā festival of lights and a swing (dolā) for the swinging rade festival (dolārohotsavakke) of the god Chenna-Keśava of Belur.'—(*Ep. Carnat.*, Vol. v, Part I, Belur Taluq, no. 14 ; Transl., p. 47 ; Roman Text, p. 107. *See Mānasāra*, under BHŪSHAṆA.)

DRĀVIḌA—A style of achitecture, a type of building once prevailing in the ancient Drāvida country (*see* details under NAGARA), India south of the Krishna corresponding to Tamil India.

(S. K. Aiyangar, *J. I. S. O. A.* of June, 1934, p. 23.)

A class of the twelve-storeyed builings :

Ravi-bhūmi-viśāle tu chāshṭa-viṁśāṁśakaṁ bhavet ।
Mahā-śālā daśāṁśaṁ syāt śeshaṁ pūrvavad ācharet ।
Pāñchālaṁ drāviḍaṁ chaiva ravi-bhūmy-alpha harmyake ।

(*M.*, xxx, 8–10.)

DRUPADA—The civic and sacrificial posts, symbolical of royal and divine power to which offenders and sacrificial victims were tied.

(*R.-V.*, I, 24, 13 ; IV, 32, 23 ; VII, 86, 5 ; *A.-V.* 63, 3 ; 115, 2 ; XIX, 47, 9 : *Vāj. Sam.*, XX, 20.

DROṆAKA (*see* under DURGA and NAGARA)—A fortified city situated on the bank of a sea, a sea-side town.

Samudrataṭinī-yuktaṁ taṭinyā dakshiṇottare ।
Vanighiḥ saha nānābhiḥ janair yuktaṁ janāspadam ।
Nagarasya prati-taṭe grāhakaiś cha samāvṛitam ।
Kraya-vikraya-saṁyuktaṁ droṇāntaram udāhṛitam ।

(*M.*, X, 75–78.)

A class of pavilion.—(*M.*, XXXIV, 423 ; *see* under MAṆḌAPA.)

DROṆA-MUKHA—A fort, a fortified town, a fortress.

A fortress to defend a group of 400 villages :

(1) Chatuś-śata-grāmyā droṇa-mukham ।

(*Kauṭilīya-Artha-śastra*, Chap. XXII, p. 46.)

(2) Nagarāṇi kara-varjitāni nigama-vanijāṁ sthānāni janapadā deśāḥ pura-varāṇi nagaraika-deśa-bhutāni droṇa-mukhāni jala-sthalapathopetāni ।

(*Praśna-Vyākaraṇa-sūtra-vyākhyāne*, p. 306, *ibid.*, p. 46, footnote.)

(3) Grāma-nagara-kheḍa-karvvaḍa-maḍaṁba-droṇa-mukha-pattana-galiṁdam aneka-māṭa-kūṭa-prāsāda-devāyatanaṁgaḷ-iṁdam-oppuva-agrahāra-paṭṭaṇaṁgaliṁdamatisāyav-appa. . . .

[At Tridāla, a merchant town situated in the centre and the first in importance among the twelve (towns), in the glorious Kunḍi Three-Thousand adorned with] ' villages, towns, hamlets, villages surrounded by hills, groups of villages, sea-girt towns and chief cities, with elegant mansions, palaces and temples, and with shining agrahāra towns in the country of Kuntala. '—(Old Kanarese Inscrip. at Terdal, line 58, *Ind. Ant.*, Vol. XIV, pp. 19, 25.)

(4) 'With myriads of people, practices of virtue, agreeable occupations, streams of the (nine) sentiments, pleasure gardens, separated lovers, splendid tanks, full lotus-beds, gilded boats for spring festivals, ghaṭikā-sthānas (religious centres), the supports of dharmma and mines of enjoyment, moats which were as if the sea being overcome had returned here on account of the collection of gems, groups of the lotus faces of beautiful women fair as the moon (grāma-nagara-kheḍa-kharvvana-madamba-droṇa-mukha-pura-pattana-rāja-dhāni), on whatever side one looked, in these nine forms did the Kuntala-deśa shine.'

(It should be noticed that the passage within brackets is almost identical with the corresponding passage in quotation no. 3 above).

(*Ep. Carnat.*, Vol. VII, Shikārpur Taluq, no. 197 ; Transl., p. 124, para. 1, last seven lines ; Roman Text, p. 214, line 27 f.)

DVĀ-DAŚA-TALA—The twelve-storeyed buildings, the twelfth storey.

(1) *See Mānasāra* (Chap. XXX, 1–191, ten classes, *ibid.*, 5-7, 8–36, *see* under PRĀSĀDA ; the general description of the twelfth storey, *ibid.*, 37–88, 89–191).

(2) Tad-adhastāt talaṁ chaikādaśa-dvā-daśa-bhūmikam ।

(*Kāmikāgama*, XXXV, 86.)

(3) Ādvā-daśa-talād evaṁ bhūmau bhūmau prakalpayat ।

(*Suprabhedāgama*, XXXI, 33.)

DVĀRA—A door, a gate, an entrance. Compare GURUDVĀRA.

(1) *Mānasāra* (Chap. XXXVIII, 2–54 ; XXXIX, 1–163) :

The situation of gates in the village or town (called Nandyāvarta) :

Grāmasya parito bāhye rakshārthaṁ vapra-saṁyutam ।
Tad-bahiḥ parito yukataṁ paritoya-pravedakaiḥ ।
Chatur-dikshu chatush-koṇe mahā-dvāraṁ prakalpayet ।
Vṛittaṁ vā chatur-aśraṁ vā vāstu-sva(-ā)-kṛiti-vaprayuk ।
Pūrva-dvāraṁ athaiśāne chāgni-dvāram tu dakshiṇe ।
Pitur dvāraṁ tu tat-pratyag vāyau dvāraṁ tathottaram ।
Pūrva-paśchima-tad-dvārau (-rayoḥ) ṛiju-sutraṁ tu yojayet ।
Dakshiṇottarayor dvārau tatra śeshaṁ (-deśe) viśeshataḥ ।
Dakshiṇottarataḥ sūtraṁ vinyasech chhilpavit-tamaḥ ।
Tasya sūtrāt tu tat-pūrve hastaṁ tad-dvāra-madhyame ।
Evaṁ dakshiṇato dvāraṁ tad-dhi tāro(-raṁ) tathoktavat ।
Uttare dvāraṁ tat sutrāt pratyag-hastāvasānakam ।

Chatur-dikshu chatur-dvāraṁ yuktaṁ vā neshyate budhaiḥ ।
Pūrve paśchimake vāpi dvāram etad(-kaṁ) dvayor api ।
Paritaś chatur-aśrāgrād dvāraṁ kuryāt tu sarvadā ।
Etat sarvaṁ mahā-dvāram upa-dvāram ichochyate ।

The smaller doors :

Nāge vāpi mṛige vātha aditiś-chodito'pi vā ।
Parjanye vāntarikshe vā pūshe vā vitathe'thavā ।
Gandharve bhṛiṅgarāje vā sugrīve vāsure'thavā ।
Yatheshṭ(am)evam upa-dvāraṁ kuryāt tal-lakshaṇoktavat ।

The water-doors (drains) :

Mukhyake vātha bhallāṭe mṛige vā chodite'pi vā ।
Jayante vā mahendre vā satyake vā bhṛiśe'thavā ।
Evam evaṁ jala-dvāraṁ kuryāt tatra vichakshaṇa ।

(*M.*, IX, 290–313.)

The gates of villages :

Svastikāgraṁ chatur-dikshu dvāraṁ teshāṁ prakalpayet ।
Evaṁ chāshṭa-mahā-dvāraṁ dikshu dikshu dvayaṁ tataḥ ।
Mṛige chaivāntarikshe vā bhṛiṅgarāja-bhṛiśe tathā ।
Śeshe vāpi cha roge vā chāditau chodite'pi vā ।
Evam etad upa-dvāraṁ kuryāt tatra vichakshaṇaḥ ।
Mahā-dvāraṁ tu sarveshāṁ lāṅgalākāra-sannibham ।
Kapāṭa-dvaya-saṁyuktaṁ dvāṛāṇāṁ tat pṛithak pṛithak ।

(*Ibid.*, 355–361.)

Chatur-dikshu chatur-dvāram upa-dvāram antarālake ।
Devānāṁ chakravartināṁ madhye dvāraṁ prakalpayet ।
Mahā-dvāram iti proktam upa-dvāram tu choktavat ।
Bhū-surādi-naraṇāṁ cha madhye dvārāṁ na (cha) yojayet ।
Madhya-sūtraṁ tu vāme tu harmya-dvāraṁ prakalpayet ।

(*M.*, XXXI, 77–81.)

Referring to the two-storeyed buildings :

Tat-pure madhyame dvāraṁ gavākshaṁ vātha kalpayet ।
Dakshiṇe madhyame dvāraṁ syād agre madhya-maṇḍapam ।
Chatur-dvāra-samāyuktaṁ pūrve sopāna-saṁyutam ।

(*M.*, XX, 81–83.)

Two entire chapters are devoted to the description of doors of the residential buildings and temples, in one of which (Chap. XXXIX, 1–163), the measurement and the component parts and mouldings are given ; mainly the situation of the doors is described in the other (Chap. XXXVIII, 2–54).

It is stated (Chap. xxxix) that the height of the door should be twice its width (line 14). But various alternative measures are also given, (lines 17–18). The height may vary from 1½ cubits to 7 cubits (line 7). The height of the smaller doors vary from 1 cubit to 3 cubits (lines 9–10). The height of the windows which are sometimes made in place of smaller doors vary from half a cubit to 2 cubits. This measurement is prescribed for doors in the Jāti class of buildings (line 28). Such other measurements are given to doors of buildings of the Chhanda, Vikalpa, and Ābhasa classes (line 29 f.). The pillars, joints, planks, shutters, panels, frames, and other parts of doors are described at great length (lines 50, 111–163). Doors are generally of two flaps ; but one-flapped door are also mentioned (line 98).

Doors are profusely decorated with the carvings of leaves and creepers (line 116). The images of Ganeśa, Sarasvatī and other deities are also carved on both sides of a door (*cf.* the concluding portions of Chaps. xix, xxx).

The chapter closes with a lengthy description of the six or rather the four main parts of doors. The door-panel (kavāṭa), door-joint (dvāra-sandhi), door-plank (phalaka), bolt (kīlabhājana), etc. are minutely described (line 137 f.).

It is stated (Chap. xxxvii) that four main doors should be constructed on the four sides of all kinds of buildings of gods and men (lines 2–4) and the smaller doors are stated to be constructed at convenient places (line 4). Many other still smaller doors are constructed at the intervening spaces (lines 19, etc). The gutters are made conveniently and sloped downwards (lines 5–7). Drains or jala-dvāra (water-gate) are made beneath the halls (line 8). The main doors are always furnished with a flight of stairs (line 12).

In some residential buildings the entrance door is made, not in the middle of the frontage, but on either side of the middle (line 17), although the general rule is to make the door in the middle of the (front wall, lines 6, etc.). But in temples and in case of kitchens in particular, the doors are generally made at the middle of the wall (line 35, *see also* Chap. xxxix, 140). For the easy upward passage (ūrdhva-gamana) of the kitchen smoke, they are furnished with the lattice (jāla, line 37).

(2) Varāha-mihira (*Bṛihat-Saṁhitā*, liii, 26–27, 70–82 ; lvi, 10) has condensed the contents of the two chapters, dealing with the measurement of door (dvāra-māna) and situation of the door (dvāra-sthāna) of the *Mānasāra*. But he does not give any absolute measurement. As

regards the situation of door, the principle seems to be two-fold in all the architectural treatises. 'The door is made on either said of the middle of the wall, mostly in private residential buildings for ladies in particular.' But according to Rām Rāz (p. 46) 'if the front of the house be ten paces in length, the entrance should be between five on the right and four on the left.'

After this, Dr. Kern quotes Utpala to show the different principles :

Tathā cha kāryāṇi yathā bhananaṁ gṛihābhyāntaram aṅgaṇaṁ viśatāṁ tāny-eva vāsa-gṛihāṇi dakshiṇato dakshiṇasyāṁ diśi bhavanti । Etad uktaṁ bhavati prāṅ-mukhasya gṛihasyāṅgaṇa-(syāgāra)-dvāram uttararābhimukhaṁ kāryaṁ dakshiṇābhimukhasya prāṅ mukhaṁ paśchimābhimukhasya dakshiṇābhimukham uttarābhimukhasya paśchimābhimukham iti ।

'How a house can be said to face the east, without having its door facing the same quarter, is beyond our comprehension.' Kern. Compare no. 4 below.

(*J.R.A.S.*, N. S., Vol. VI, p. 291, note 1.)

Varāha-mihira himself, however, states (*Bṛihat-Saṁhitā*, LVI, 10) the most general principle of the position of the door, which Dr. Kern does not seem to have taken any notice of (compare his translation of the following verse, *J. R. A. S.*, N. S., Vol. VI, p. 318) :

Chatuḥ-shashṭi-padaṁ kāryaṁ devāyatanaṁ sadā ।
Dvāraṁ cha madhyamaṁ tatra samadikstham praśasyate ॥

'The (area of the) temple is always divided into 64 squares (*see* PADA-VINYĀSA). Therein (i.e. in the temple) the door is made at the middle (of the front wall) and it is highly commendable, when the door is placed at the same line (*lit.* same direction) with the idol.'

Dr. Kern interprets the second line as 'the middle door in one of the four cardinal points.' The rules in the *Mānasāra* as also the existing temples support the interpretation, namely, 'the door is made at the middle' (of the front wall).

(3) *Vāstu-sāra* (by one Maṇḍaṇa, Ahmedabad, 1878) lays down (1, 6) that the house may have the front side (with entrance) at any direction according to the choice of the occupants, and states distinctly that the face of the house may be made at four directions (kuryāch chatur-diśaṁ mukham).

(4) *Gārga-Saṁhitā* (MS. R. 15, 96, Trinity College, Cambridge) has apparently three chapters on the subject of door : dimensions of door (dvāra-pramāṇa, fol. 57*b*, 68*b*, same as dvāra-māna of the *Mānasāra*) ;

situation of door (dvāra-nirdeśa, Chap. III, fol. 57*a*, corresponds more or less with dvāra-sthāna or position of door, of the *Mānasāra*) ; and height of the door-pillar (dvāra-stambhochchhraya-vidhi, fol. 60*b*) ; there is no such separate chapter in the *Mānasāra*, although door pillars are occasionally described.

As regards dvāra-dosha (penalties of defective doors), Varāhamihira seems to have condensed (*Bṛihat-Saṁhitā*, LIII, 72–80) the contents of Gārga (fol. 68*b*).

(5) *Vāstu-śāstra* (of Rājavallabha Maṇḍaṇa, v. 28, ed. Nārāyaṇa Bhārati and Yaśovanta Bhārati, Anahillapura, S. V. 947) :

> Dvāraṁ matsya-matānusāri daśakaṁ yogyaṁ vidheyaṁ budhaiḥ—' following the rules of the *Matsya-Purāṇa* the learned (architects) recommend ten suitable doors (for a building)'.

(6) *Vāstu-pravandha* (II, 8, compiled by Rājakisora Varmma) :

> Dvārasyopari ya(d)-dvāraṁ dvārasyānyā (?) cha saṁmukham ।
> Vyayadaṁ tu yadā tach cha na karttavyaṁ śubhepsubhiḥ ॥

' Those, who want prosperity, should not make one door above or in front of another because it is expensive.'

(7) *Silpa-śāstra-sāra-saṁgraha*, VII, 24 :

> Chatur-dvāraṁ chatur-dikshu chaturaṁ (?) cha gavākshakam ।
> Nṛipāṇāṁ bhavane śreshṭham anyatra parivarjayet ॥

' It is highly commendable for the buildings of the kings to make four doors at four directions and four windows. This rule need not be observed in other cases. '

(8) *Bhavishya-Purāṇa* (Chap. CXXX, v. 17) has the same verse as (2) except that it reads ' samadik saṁpraśasyate ' in place of ' samadikstham praśasyate ' of the *Bṛihat-Saṁhitā*.

(9) *Matsya-Purāṇa* (Chap. CCLV, vv. 7–9) :

> Vāsa-gehaṁ sarveshāṁ praviśed dakshiṇena tu ।
> Dvārāṇi tu pravakshyāmi praśastānīha yāni tu ॥
> Pūrveṇendraṁ jayantaṁ cha dvāraṁ sarvatra śasyate ।
> Yāmyaṁ cha vitathaṁ chaiva dakshiṇena vidur budhāḥ ॥
> Paśchime pushpadantaṁ cha vāruṇaṁ cha praśasyate ।
> Uttareṇa tu bhallāṭaṁ saumyaṁ tu śubhadaṁ bhavet ॥

For all kinds of *residential buildings* the *southern face* of the house is expressly recommended here, while doors are directed to be constructed at all the eight cardinal points.

Cf. Daśa-dvārāṇi chaitāni krameṇoktāni sarvadā ।

(*Ibid.*, Chap. CCLXX, v. 28.)

(10) *Agni-Purāṇa* (Chap. CIV, v. 24) :

Dikshu dvārāṇi kāryāṇi na vidikshu kadāchana ।

'The doors should be constructed at the cardinal points and never at the intermediate corners'.

(11) *Garuḍa-Purāṇa* (Chap. XLVI, v. 31) :

Dvāraṁ dīrghārddha-vistāraṁ dvārāṇy-ashṭausmṛitāni cha ।

'The breadth of the door should be half of its height (length) and there should be eight doors (in each house).'

(12) *Vāstu-vidyā* (ed. Gaṇapati Śāstri, IV, 1–2, 19–22 ; v. 21 ; XIII, 24–32 ; XIV, 1–3) :

Atha dve prāṅmukhe dvāre kuryād dve dakshiṇāmukhe ।
Dvāre pratyaṅmukhe dve cha dve cha kuryād udaṅmukhe ॥ (1)
Māhendre prāṅmukhaṁ dvāraṁ praśastaṁ śishṭa-jātishu ।
Aparaṁ tu tathā dvāraṁ jayante prāha niśchayāt ॥ (2)
Antar-dvārāṇi choktāni bahir-dvāraṁ athochyate ॥ (19)
Yatronnataṁ tato dvāraṁ yatra nimnaṁ tato gṛiham ।
Gṛihe chāpy-ashṭame rāśau tatra dvāraṁ na kārayet । (20)
Gṛihakshate cha māhendre brāhmaṇānāṁ prakīrtitam ।
Mahīdhare cha some cha pha(bha)llāṭārgalayos tathā ॥ (21)
Śayanīyaṁ tu kartavyaṁ praśastaṁ pūrvataḥ śikhā ।
Nava-dvārākṛitaṁ kuryād antarikshe mahānasam ॥ (22)
Dvāraṁ yatra cha vihitaṁ tad-dig-adhīśādhipaṁ bhaved dhāma ।
Eka-talaṁ vā dvi-talaṁ dvi-tale dvi-mukhaṁ cha nirmukhaṁ vā syāt ॥ (21)

Position of the door :

Dvāraṁ cha dikshu kartavyaṁ sarveshām api veśmanām ।
Madhyastha-dvāra-madhyaṁ syād vāstu-mandira-sūtrayoḥ ॥ (24)
Upadvārāṇi yujyantāni pradakshiṇyāt sva-yonitaḥ ।
Dvāra-pādasya vistāraṁ tulyam uttara-tārataḥ ॥ (25)
Sva-sva-yonyā gṛihādīnāṁ kartavyā dvāra-yonayaḥ । (26)
Āgneyyāṁ mandiraṁ dvāraṁ dakshiṇābhimukhaṁ smṛitam ।
Pratyaṅmukhaṁ tu nairṛityāṁ vāyavyāṁ tad udaṅmukham ॥ (31)
Iśe tat prāṇmukhaṁ kuryāt tāni syuḥ pādukopari । (32)

Then follows the measurement of the mouldings of the door (26–30).

The door-panels are described next :

Kavāṭa-dvitayaṁ kuryān mātṛi-putry-abhidhaṁ budhaḥ ।
Dvāra-tāre chatush-pañcha-shaṭ-saptāshṭa vibhājite ॥ (1)
Ekāṁśa(ṁ) sūtra-paṭṭiḥ syāt samaṁ vā bahalaṁ bhavet ।
Ardhaṁ vā pāda-hīnaṁ vā bahalaṁ parikīrtitam ॥ (2)
Dvārāyāma-samāyāmā kāryā yugmāś cha paṅktayaḥ ।
Aśvyādi-veśma-paryantāḥ paṅktayaḥ parikīrtitāḥ ॥ (3)

(13) *Maṭha-pratiṣṭhā*, by Raghunandana quotes from the *Devī-Purāṇa* without further reference :

Plāksham dvāram bhavet pūrve yāmye chaudumbaram bhavet ।
Paśchad aśvattha-ghaṭitam naiyagrodham tathottare ।

(14) *Kauṭilīya-Artha-śāstra* (Chap. XXIV, pp. 52, 53, 54) :

Āgrāhye deśe pradhāvitikām niskhura-dvāram cha ।
Prākāram ubhayato maṇḍalaka-madhyārdha-daṇḍam kṛitvā pratolī-shaṭ-tulāntaram dvāram niveśayet ।
Pañcha-hasta-maṇi-dvāram ।
Prākāra-madhye kṛitvā vāpīm pushkariṇīm dvāram chatuś-śālam adhyardhāntarāṇīkam kumārī-puram muṇḍa-harmyam dvitalam muṇḍaka-dvāram bhūmi-dravya-vaśena vā tri-bhāgādhikāyāmāḥ bhāṇḍa-vāhinī-kulyāḥ kārayet ।
Sa-dvādaśa-dvāro yuktodaka-bhūmich-chhanna-pathaḥ ।
Saināpatyāni dvārāṇi bahiḥ parikhāyāḥ ।

(*Ibid.*, Chap. XXV, p. 54 f.)

Kishku-mātra-maṇi-dvāram antarikāyām khaṇḍa-phullārtham asaṁpātam kārayet ।
Pratiloma-dvāra-vātāyana-bādhāyām cha anyatra rāja-mārga-rathyābhyaḥ ।

(*Ibid.*, Chap. LXV, pp. 166, 167.)

(15) *Rāmāyaṇa* (Laṅkākāṇḍa, Sarga 3, 1, 11, 13, 16) :

Dṛiḍha-vaddha-kapāṭāni mahā-parigha-vanti cha ।
Chatvāri vipulāny-asyā dvārāṇi sumahānti cha ॥ (11)
Dvāreshu saṁskṛitā bhīmāḥ kālāya-samayāḥ śitāḥ ।
Śataśo rachitā vīraiḥ śataghnyo rakshasā gaṇaiḥ ॥ (13)
Dvāreshu tāsām chatvāraḥ sakramāḥ paramāyatāḥ ॥
Yantrair upetā bahubhir mahadbhir gṛiha-paṅktibhiḥ ॥ (16)

(16) *Kāmikāgama* (XXXV, 6–13) :

Bhallāṭe pushpadante cha mahendre cha grahā(gṛiha)kshate ।
Chatur-dvāram prakartavyam sarveshām api vāstūnām ॥ (6)

Then are given the details concerning the position of doors in various quarters (7–9). Next follows their measurement (10–13).

Cf. Devānām manujānām cha viśeshād rāja-dhāmani ।
Pushpadante cha bhallāṭe mahendre cha grahā(gṛiha)kshate ॥
Upa-madhye'thavā dvāram upa-dvāram tu vā nayet ॥

(*Ibid.*, v. 118, 118*a*.)

Pratyaṁmukham tu śayanam doshadam dakshiṇāmukham ।
Dvāre pādetu neshṭa(ṁ) syāt nodak-pratyak chh(ś)iro bhavet ॥
Bhojanam nānuvaṁśam syāch chhayanam 'cha tathaiva cha ।
Anuvaṁśa-gṛiha-dvāram naiva kāryam śubhārthibhiḥ ॥

(*Ibid.*, v. 146, 157.)

Bhallāṭe dvāram ishṭaṁ syād brāhmaṇānāṁ viśeshataḥ ||
Madhya-sūtrasya vāme vā dvāraṁ vidhivad ācharet ||
(*Ibid.*, v. 165, 168.)

Jala-dvāraṁ punas teshāṁ pravakshyāmi niveśānām |
(*Ibid.*, v. 167–176.)

Devānām ubhayaṁ grāhyaṁ madhya-dvāraṁ tu vai tale ||
Gopuraṁ cha khalūrī cha mūla-vāstu-nirīkshitam ||
Antare rāja-devīnāṁ grihāny-antar-mukhāni cha ||
(*Ibid.*, xxxv, 54, 128.)

Daṇḍikā-vāra-saṁyuktaṁ shaṇ-netra-sama-vaṁśakam |
Vaṁśopari gatāḥ śālāś chattāro'shṭānanānvitāḥ ||
(*Ibid.*, xlii, 19.)

(17) *Suprabhedāgama* (xxxi, 7, 131–133) :

Bāhya-bhittau chatur-dvāram athavā dvāram ekataḥ || (7)

Referring to the temples of the attendant deities built in the five courts (prākāra) :

Prākāra-saṁyutaṁ kṛitvā bāhye vābhyantare'pi vā |
Pūrve tu paśchime dvāraṁ paśchime pūrvato mukham || (131)
Dakshiṇe chottara-dvāram uttare dakshiṇonmukham |
Vahniśāna-sthitaṁ yat tat paśchime dvāram ishyate || (132)
Nīlānila-sthitaṁ chaiva pūrva-dvāraṁ praśasyate |
Vṛishasya maṇḍapaṁ tatra chatur-dvāra-samāyutaṁ || (133)

(18) *Mahābhārata* (v, 91, 3 ; 1, 185, 119–122) :

Tasya (duryodhana-gṛihasya) kakshyā vyatikramya tisro dvāḥsthair avāritaḥ ||
Prāsādaiḥ sukṛitochchhrayaiḥ ||
Suvarṇajāla-saṁvṛitair maṇi-kuṭṭima-bhūshaṇaiḥ ||
Sukhārohaṇa-sopānair mahāsana-parichchhadaiḥ ||
Asaṁbādha-śata-dvāraiḥ śayanāsana-śobhitaiḥ ||

(19) *See Ep. Ind.* (Vol. 1, Dabhoi Inscrip, v. 111, p. 31).

(20) Vijaya-vikshepāt bharukachchha-pradvāravasakaṭat—' from the camp of victory fixed before the gates of Bharukachchha.'—(Umetā grant of Dadda II, line 1, *Ind. Ant.*, Vol. VII, pp. 63, 64.)

(21) Svarṇa-dvāraṁ sthāpitaṁ toraṇena sārddhaṁ śrīmal-lokanāthasya gehe—' placed a golden door and a toraṇa in the temple of glorious Lokanātha.'

' The inscription is on the lintel of the door of the temple of Avalokiteśvara in Bungmati. The door is made of gilt brass plates, and adorned by relieves. The arch or toraṇa above the door, which is likewise made of brass, encloses three images of Lokeśvara.'—(Inscriptions from Nepal, no. 21, Inscrip. of Śrinivāsa, line 6 f., *Ind. Ant.*, Vol. IX, p. 192, note 62.)

(22) Ātīrtha-dvāra-paksha-śobhārttham mādisidam—'had the side-doors of that tīrtha made for beauty.'—(*Ep. Carnat.*, Vol. II, no. 115; Roman Text, p. 87; Transl., p. 171.)

(23) *See* Chālukyān Architecture.—(*Arch. Surv.*, New Imp. Series, Vol. XXI, Plates V, figs. 1, 2; LIV; LXXIV; XCV; CXIII, figs. 1, 2.)

(24) *See* Buddhist Cave Temples.—(*Ibid.*, Vol. IV, Plates XXIV; XXIV, no. 1; XXXII, nos. 1, 2; XXXV; XLIII, no. 2.)

(25) *See* Cunningham's *Arch. Surv. Reports*.—(Vol. XIX, Plates XIX.)

DVĀRAKA—A gate-house.

Prāsāde maṇḍape sarve gopure dvārake tathā |
Sarva-harmyake kuryāt tan-mukka-bhadram |—(*M.*, XVIII, 326–328.)

DVĀRA-GOPURA (same as MAHĀ-GOPURA)—The gate-house of the fifth or last court.

(*Suprabhedāgama*, XXXI, 125; *see* under PRĀKĀRA.)

DVĀRA-KOSHṬHA(-KA)—A gate-chamber.

The index of the Divyāvadāna quoted by way of comparison with Svakīyāvāsanikā-dvāroshṭha, dvāroshṭha-nishkāsapraveśaka, and nish-kāsa-praveśa-dvāroshṭhaka.

(Siyodoni Inscrip., lines 14, 32, 33, *Ep. Ind.*, Vol. I, pp. 165, 175, 177.)

DVĀRA-PRĀSĀDA—The gate-house of the third court.

See Mānasāra (XXXIII, 9, under GOPURA).

See also Suprabhedāgama (XXXI, 124, under PRĀKĀRA).

DVĀRA-ŚĀKHĀ (*see* ŚĀKHĀ)—The door-lintel, the door-frame, jamb or post.

'He, the emperor of the South, caused to be made of stone for Vijaya-nārāyaṇa (temple), latticed window, secure door-frame, door-lintel (*dvāra-sakhali*), kitchen, ramparts, pavilion and a pond named Vāsudeva-tīrtha.'

(*Ep. Carnat.*, Vol. V, Part I, Belure Taluq, no. 72; Transl., p. 61; Roman Text, p. 142, line 7.)

DVĀRA-ŚĀLĀ (*see* GOPURA)—A gate-house.

The gate-house of the second court.

(*M.*, XXXIII, 8, and *Suprabhedāgama*, XXXI, 124; *see* under PRĀKĀRA.)

DVĀRA-ŚOBHĀ (*see* GOPURA)—A gate-house.

The gate-house of the first court.

(*M.*, XXXIII, 8, and *Suprabhedāgama*, XXXI, 123; *see* under PRĀKĀRA.)

DVĀRA-HARMYA (*see* GOPURA)—A gate-house.

The gate-house of the fourth court.

(*M.*, XXXIII, 9, and *Suprabhedāgama*, XXXI, 125 ; *see* under PRĀKĀRA.)

DVI-TALA—The two-storeyed buildings.

Mānasāra describes the two-storeyed buildings in a separate chapter (XX, 1–115) ; the eight classes (*ibid.*, 2-45 ; *see* under PRĀSĀDA) ; the general description of the second floor (*ibid.*, 46–115).

Cf. Purato'sya shoḍaśānāṁ varāṁgakānāṁ dvi-bhumika-gṛihāṇi ālidvayena ramyāny-achīkaraj jaya-sainyeśaḥ—'in front of the temple he (Jaya) erected two rows of double-storeyed house for sixteen female attendants.'—(Chebrolu Inscrip. of Jaya, v. 46, *Ep. Ind.*, Vol. VI, pp. 40, 39.)

DVI-TĀLA—A sculptural measure (*see* details under TĀLA-MĀNA.)

DVI-PAKSHA (*cf.* EKA-PAKSHA)—Two sides, a street (or wall) having footpaths on both sides.

Dakshiṇottara-rathyaṁ tat tat saṁkhyā yathcshṭakā ।
Evaṁ vīthir dvi-pakshaṁ(-shā) syān madhya-rathycna(-ka)-pakshakam ।
Tasya mūlāgrayo(r) deśa kshatra(? kskudro)-mānaṁ prakārayet ।
Bāhya-vīthir dvi-pakshaṁ(-shā) syāt tad-bahiś chāvṛitaṁ budhaiḥ ।

(*M.*, IX, 350–353.)

Rathyā sarvā dvi-pakshaṁ(-shā) syāt tiryan-mārgaṁ yathechchhaya ।

(*Ibid.*, 465. *See also M.*, IX, 396 ; XXXVI, 86-87 ; under EKA-PAKSHA.)

DVI-VAJRAKA—A column with sixteen rectangular sides.

Cf. Vajro'shṭāśrir dvi-vajrako dvi-guṇaḥ ।

(*Bṛihat-Saṁhitā*, LIII, 28 ; *see* under STAMBHA.)

DVYAŚRA-VṚITTA—A two-angled circle, an oval building.

(*M.*, XIX, 171 ; XI, 3, etc. ; *see* under PRĀSĀDA.)

DH

DHANADA (*see* UTSEDHA)—A type of pavilion, a kind of height, an image.

A height which is $1\frac{3}{4}$ of the breadth of an object—(*See M.*, XXXV, 22–26 and *cf. Kāmikāgama*, L, 24–28, under ADBHUTA).

The image of the god of wealth—(*M.*, XXXII, 140).

A class of pavilions—(*M.*, XXXIU, 398 ; *see* under MAṆḌAPA).

DHANUR-GRAHA—A measure, a cubit (hasta) of 27 aṅgulas.

(*M.*, II, 52, and *Suprabhedāgama*, XXX, 26 ; *see* under AṄGULA.)

DHANUR-MUSHṬI—A measure, a cubit (hasta) of 26 aṅgulas.

(*M.*, II, 51, and *Suprabhedāgama*, XXX, 26 ; *see* under AṄGULA.)

DHANUS—A measure of four cubits.

(*M.*, II, 53 ; *see* under AṄGULA.)

DHANVA-DURGA—A fort (*see* details under DURGA).

DHAMMILLA—The braided and ornamented hair of a woman tied round the head and intermixed with flowers, pearls, etc.

A headgear (*M.*, XLIX, 14, etc.).

DHARMA-GANJA—A library in the University of Nalanda, comprising three buildings known as *Ratnodadhi*, *Ratnasāgara*, and *Ratnaranjaka*.

(Tibetan account of the Univeristy of Nalanda.)

DHARMA-DHĀTU-MAṆḌALA—The relic shrine of Nepalese temples, situated at the fourth storey of five-storeyed pagoda-like structures, the basal floor being occupied by Śākya-muṇi, second by Amitābha, the third being a small chaitya, and the fifth or apex being called vajra-dhātu-maṇḍala.

(*See* Deva Bhavānī temple, Bhatgaon, Fergusson : *History of Ind. and East. Arch.*, 1910, Vol. I, p. 281.)

DHARMA-RĀJIKĀ—A monument, a tope.

Tau darmma-rājikāṁ saṅgaṁ dharmma-chakraṁ punar navam ।

'They repaired the dharma-rājikā (i.e. stūpa) and the dharma-chakra with all its parts.'—(Sarnath Inscrip. of Mahipāla, line 2, *Ind. Ant.*, Vol. XIV, p. 140, note 6.)

DHARMA-ŚĀLĀ—A rest-house.

(Vincent Smith, Gloss., *loc. cit.*, to Cunningham's *Arch. Surv. Reports*.)

DHARMA-STAMBHA—A kind of pillar.

(*M.*, XLVII, 14 ; *see* under STAMBHA.)

DHARMĀLAYA—A rest-house.

Tatraiva sa(t)tra-śālā vā āgneye pānīya-maṇḍapam ।
Anya-dharmālayaṁ sarvaṁ yatheshṭaṁ diśato bhavet ।

(*M.*, IX, 139–140.)

DHĀTU (*cf.* TRIDHĀTUSARANA)—Storey. (*R.-V.*, IV, 200.)

DHĀTU-GARBHA—Buddhist dagoba, same as chaitya and as stūpa, the relic receptacle or inner shrine, and is 'strictly applicable only to the dome of the stūpa, sometimes called the *aṇḍa* or egg.' These monuments were 'not merely relics in the literal sense, but memorials in an extended acceptation, and were classified as corporeal remains; objects belonging to the teacher, as his staff, bowl, robe holy spots, etc., and any memorial, text of a sacred book, cenotaph of a teacher, etc.'

DHĀNYA-STAMBHA—A kind of pillar.

(*M.*, XLVII, 14; *see* under STAMBHA.)

DHĀMAN—A dwelling house.

(*R.-V.*, I, 144, 1; II, 3, 2; III, 55, 10; VIII, 61, 4; X, 13, 1; *A.-V.*, IV, 25, 7; VII, 68, 1; XII, 52; *Vāj. Sam.*, IV, 34; *Taitt. Sam.*, II, 7, 2.)

DHĀRAṆA—A type of building, a pillar, a roof, a tree.

A class of the seven-storeyed buildings.

(*M.*, XXV, 26; *see* under PRĀSĀDA.)

A synonym of pillar (*M.*, XV, 6) and of roof (*M.*, XVI, 52).

A kind of tree of which pillars are constructed (*M.*, XV, 348-350).

DHĀRĀ-KUMBHA—A moulding of the base.

(*M.*, XIV, 46; *see* the lists of mouldings, under ADHISHṬHĀNA.)

DHĀRĀ-NĪLA—A blue stream of water, the line of sacred water descending from the phallus.

In connexion with the phallus:

Garbha-geha-sthale dhārā-nīla-madhye samaṁ bhavet।

(*M.*, LII, 173.)

DHĀRĀ-LIṄGA—A kind of phallus with fluting at the top portion.

(*M.*, LII, 135; LIII, 48; *see* details under LIṄGA.)

DHVAJA-STAMBHA (*see* STAMBHA)—Flagstaffs, free-pillars erected generally by the worshippers of Śiva, a pillar or pilaster decorated with banner or flag (dhvaja) at the top.

N

NAKULA—The cage of the mungoose (*M.*, L, 245; *see* under BHŪSHAṆA).

NAKHA—The nail, its measurement, etc., when belonging to an image.

(*M.*, LIX, LXV, etc., 21.)

NAKSHATRA-MĀLĀ—The garland of stars, an ornament.

(*M.*, L, 297 ; *see* under BHŪSHAṆA.)

NAGARA(-RĪ) (*cf.* GRĀMA)—Probably from Naga, *lit.* immovable or rock, implying permanence and strength with reference to stone-walls, etc. The *purs* were mere fort while *pura* as in Tripura and Mahāpura was something much bigger (*Tait. Sam.*, VI, 2, 3, 4 ; *Kāth. Sam.*, XXIV, 10 ; *Sat. Brā.* VI, 3, 3, 35 ; *Ait. Brā.*, II, 11 ; *Mait. Sam.*, III, 8, 1). Thus *pur* might have been the prototype of *pura*, the developed city, and nagara the full-fledged capital city.

(1) Definition :

Janaiḥ parivṛitaṁ dravya-kraya-vikrayakādibhiḥ ।
Aneka-jāti-saṁyuktaṁ karmakāraiḥ samanvitam ॥
Sarva-devatā-saṁyuktaṁ nagaraṁ chābhidhīyate ॥

(*Kāmikāgama*, XX, 5–6.)

(2) Dhaṇu-śataṁ parihāro grāmasya syāt samantataḥ ।
Samyāpātās trayo vāpi tri-guṇo nagarasya tu ॥

(*Manu-Saṁhitā*, VIII, 237.)

(3) Dhaṇuḥ-śataṁ parihāro grāma-kshetrāntaraṁ bhavet ।
Dve śate kharvaṭasya syān nagarasya chatuḥ śatam ॥

(*Yājñavalka*, II, 167.)

(4) Nagarādi-vāstuṁ cha vakshye rājyādi-vṛiddhaye ।
Yojanaṁ yojanārddhaṁ vā tad-arthaṁ sthānam āśrayet ॥
Abhyarchya vāstu-nagaraṁ prākārādyaṁ tu kārayet ।
Īśādi-triṁśat-padake pūrva-dvāraṁ cha sūryake ॥
Gandharvābhyāṁ dakshiṇe syād vāruṇye paśchime tathā ।
Saumya-dvāraṁ saumya-pade kārya haṭyās tu vistarāḥ ॥

(*Agni-Purāṇa*, Chap. CVI, v. 1–3.)

Then follows the location of the people of different castes and professions in various quarters (*ibid.*, v. 6–17).

(5) Chhinna-karṇa-vikarṇaṁ cha vyajanākṛiti-saṁsthitam ॥
Vṛittaṁ vajraṁ cha dīrghaṁ cha nagaraṁ na praśasyate ॥

(*Brahmāṇḍa-Purāṇa*, Part I 2nd Anushṅaga-pāda, Chap. VII, vv. 107, 108 ; *see also* vv. 94, 110, 111.)

(6) *Kauṭilīya-Artha-śastra* (Chap. XXII, p. 46, footnote) :
Nagaraṁ rāja-dhānī ।

(*Rāyapasenī–sūṭra–vyākhyāne*, p. 206.)

Nagrāṇi kara-varjitāni nigama-vaṇijāṁ sthānāni ।

(*Praśna–vyākaraṇa–śūṭra–vyākhyāne*, p. 306.)

(7) *Mānasara* (Chap. x, named Nagara) :

The dimension of the smallest town unit is 100×200×4 cubits ; the largest town-unit is 7200×14400×4 cubits (lines 3–33). A town may be laid out from east to west or north to south according to the position it occupies (line 102). There should be one to twelve large streets in a town (lines 110-111). It should be built near a sea, river or mountain (lines 73, 51), and should have facilities for trade and commerce (lines 48, 74) with the foreigners (line 63). It should have defensive walls, ditches and forts (line 47) like a village. There should be gate-houses (gopura, line 46), gates, drains, parks, commons, shops, exchanges, temples, guest houses, colleges (line 48 f.) etc., on a bigger scale than in a village.

Towns are divided into eight classess, namely, Rāja-dhānī, Nagara, Pura, Nagarī, Kheṭa, Kharvaṭa, Kubjaka, and Pattana (lines 36–38).

The general description of towns given above is applicable more or less to all of these classes.

For purposes of defence, the capital towns commanding strategic points are well fortified and divided into the following classes : Śibira, Vāhini-mukha, Sthānīya, Droṇaka, Saṁvidda, Kolaka, Nigama, and Skandhāvāra (lines 38–41, 65–86). The forts for purely military purposes are called giri-durga, vana-durga, salila-durga, paṇka-durga, ratha-durga, deva-durga and miśra-durga (lines 86–87, lines 88–90 90–107 ; *see* under DURGA).

(8) ' On the banks of the Sarayū is a large country called Kośala gay and happy and abounding with cattle, corn and wealth. In that country was a famous city called Ayodhyā, built formerly by Manu, the lord of men. A great city twelve yojanas (108 miles) in length and nine yojanas (81 miles) in breadth, the houses of which stood in triple and long extended rows. It was rich and perpetually adorned with new improvements, the streets and lanes were admirably disposed, and the principal streets well watered. It was filled with merchants of various descriptions, and adorned with abundance of jewels ; difficult of access, filled with spacious houses, beautified with gardens,

and groves of mango trees, surrounded by a deep and impassable moat, and completely furnished with arms; was ornamented with stately gates and porticoes and constantly guarded by archers. As Maghavan protects Amarāvatī, so did the magnanimous Daśaratha, the enlarger of his dominions, protects Ayodhyā, fortified by gates, firmly barred, adorned with arcas disposed in regular order, and abounding with a variety of musical instruments and war-like weapons; and with artifices of every kind. Prosperous, of unequalled splendour it was constantly crowded with charioteers and messengers, furnished with śataghnis (*lit.* an instrument capable of destroying a hundred at once, that is, a cannon) and parighas (a kind of club), adorned with banners and high-arched porticoes, constantly filled with dancing girls and musicians, crowded with elephants, horses and chariots, with merchants and ambassadors from various countries, frequented by the chariots of the gods, and adorned with the greatest magnificence. It was decorated with various kinds of jewels, filled with wealth, and amply supplied with provisions, beautified with temples and sacred chariots (large cars), adorned with gardens and bathing tanks and spacious buildings and full of inhabitants. It abounded with learned sages, in honour equal to the immortals; it was embellished with magnificent palaces, the domes of which resemble the tops of mountains, and surrounded with the chariots of the gods like the Amarāvatī of Indra, it resembled a mine of jewels or the residence of Lakshmī (the goddess of prosperity); the walls were variegated with divers sorts of gems like the division of a chess-board, and it was filled with healthful and happy inhabitants; the houses formed one continued row, of equal height, resounding with the delightful music of the tabor, the flute and the harp.'

'The city, echoing with the twang of the bow, and sacred sound of the Veda was constantly filled with convivial assemblies and societies of happy men. It abounded with food of the most excellent kinds; the inhabitants were constantly fed with the śālī rice; it was perfumed with incense, chaplets of flowers, and articles for sacrifice, by their odour cheering the heart.'

'It was guarded by heroes in strength equal to the quarter-masters and versed in all śāstras; by warriors, who protect it, as the nāgas guard Bhogavatī. As the Great Indra protects his capital, so was this city, resembling that of the gods, protected by King Daśaratha, the chief of the Ikshvākus. This city was inhabited by the twiceborn who maintained the constant sacrificial fire, (men) deeply read in the *Veda* and its six *Aṅgas*, endowed with excellent qualities, profusely generous,

full of truth, zeal, and compassion, equal to the great sages, and having their minds and appetites in complete subjection.'—(*Rāmāyaṇa*, I, 5, 5–17.)

'Lankā, filled with mad elephants, ever rejoiceth. She is great, thronging with cars and inhabited by Rākshasas. Her doors are firmly established and furnished with massy bolts. And she hath four wide and giant gates. (At those gates) are powerful and large arms, stones and engines, whereby a hostile host approaching is opposed. At the entrance are arrayed and set in order by bands of heroic Rākshasas, hundreds of sharp iron śatagnis (firearms, guns). She hath a mighty impassable golden wall, having its side emblazoned in the centre with costly stones, coral, lapises and pearls. Round about is a moat, exceedingly dreadful, with cool water, eminently grand, fathomless, containing ferocious aquatic animals, and inhabited by fishes. At the gates are four broad bridges, furnished with machines and many rows of grand structures. On the approach of the hostile forces, their attack is repulsed by these machines, and they are thrown into the ditch. One amongst these bridges is immovable, strong and fast established; adorned with golden pillars and daises . . . And dreadful and resembling a celestial citadel, Lankā cannot be ascended by means of any support. She hath fortresses composed of streams (*cf.* JALA-DURGA), those of hills, and artificial ones of four kinds. And way there is none even for barks, and all sides destitude of division. And that citadel is built on the mountain's brow; and resembling the metropolis of the immortals, the exceedingly invincible Lankā is filled with horses and elephants. And a moat and śataghnis and various engines adorn the city of Lankā, belonging to the wicked Rāvaṇa . . . his abode consists of woods, hills, moat, gateways, walls, and dwellings.'—(*Ibid.*, VI, Laṅkākāṇḍa, 3rd Sarga.)

(9) The *Mahābhārata* has 'short but comprehensive account of the city of Dvārakā (I, 111, 15), Indra-prastha (I, 207, 30 f.), the floating city (III, 173, 3), Mithilā (III, 207, 7), Rāvaṇa's Lankā (III, 283, 3 and 284, 4, 30), the sky-town (VIII, 33, 19), and the ideal town (XV, 5, 16). In the *Rāmāyaṇa* we find nearly the same descriptions as those in this later part of the Epic (*Mbh.*).'

(10) 'We may examine the general plan of a Hindu city . . . it had high, perhaps concentric, walls about it, in which were watch-towers. Massive gates, strong doors[1] protected chiefly by a wide bridge moat, the latter filled with crocodiles and armed with palings, guarded

[1] XV, 16, 3: the king left Hastināpur by a high gate.

the walls. The store-house was built near the rampart. The city was laid out in several squares.[1] The streets were lighted with torches.[2] The traders and the king's court made this town their residence. The farmers lived in the country, each district guarded if not by a tower modelled on the great city, at least by a fort of some kind. Out of such fort grew the town. Round the town as round the village, was the 'common land to some distance' (later converted into public gardens, as we see in the *Mudrārākshasa*).

'In the city special palaces existed for the king, the princes, the chief priests, ministers and military officers. Besides these and humble dwellings (the larger houses being divided into various courts), there were various assembly halls, dancing-halls, liquor-saloons, gambling halls, courts of justice, and the booths of small traders with goldsmiths, shops, and the work-places of other artisans. The arsenal appears to have been not far from the king's apartments. Pleasure parks abounded. The royal palace appears always to have had its dancing-hall attached. The city-gates ranged in number from four to eleven, and were guarded by squads of men and single wardens.[3] Door-keepers guarded the courts of the palace as well as the city gates.'[4]—(Hopkins, *J.A.O.S.*, 13, pp. 175, 176.)

(11) 'It will probably be a revelation to modern architects to know how scientifically the problems of town-planning are treated in these ancient India's architectural treatises. Beneath a geat deal of mysticism which may be scoffed at as pure superstition, there is a foundation of sound common sense and scientific knowledge which should appeal to the mind of the European expert.'

'The most advanced science of Europe has not yet improved upon the principles of the planning of the garden cities of India based upon the Indian village-plan as a unit.'

[1] The *Mbh.* recommends six squares, but I find only four mentioned in the *Rāmāyaṇa*, II, 48, 19.

Mbh., XV, 5, 16 : Puraṁ Sapta–padaṁ sarvato-diśam (town of seven walls, but Hopkins does not think that there were walls)

[2] *Rāmāyaṇa*, VI, 112, 42 : Sikta-rathyāntarāpaṇa.

Mbh., I, 221, 36 : Indraprastha is described as sammrishṭāsikta-panthā.

[3] *Kāṭhaka–Upanishad*, V, 1, speaks of a town with eleven gates as a possibility (the body is like a town with eleven gates.) Nine gates are given to a town by Varāha, p. 52, 5 : Nava dvāraṁ . . . ekastambhaṁ chatushpatham. Laṅkā has four bridged gates (eight in all and eight walls) (*R.*, VI, 93, 7). Four gates are implied in the 6th act of Mṛichchhakaṭika where the men are told to go to the four quarters to the gates.

[4] These courts have mosaic pavements of gold. (*R.*, VI, 37, 27, 58, *Mbh.*, I, 185, 20 ; II, 33 and 34.)

'The Indo-Aryan villages took the layout of the garden-plot as the basis of its organization. But more probably the village scheme was originally the plan of the military camp of the Aryan tribes when they first established themselves in the valley of the Indus.'—(Havel *A Study of Indian Civilization*, pp. 7–8, 18.)

(12) The principles of Indian town-planning have some striking similarity to those of early European cities. It would be interesting to compare the *Mānasāra* with *Vitruvius* :

> 'In setting out the walls of a city the choices of a healthy situation is of the first importance. It should be on high ground neither subject to fogs nor rains ; its aspects should be neither violently hot nor intensely cold, but temperate in both respects . . .
>
> 'A city on the sea-side, exposed to the south or west, will be insalubrious.'—(*Vitruvius*, Book I, Chap. IV.)

'When we are satisfied with the spot fixed on for the site of the city, as well as in respect of the goodness of the air as of the abundant supply of provisions for the support of the population, the communications by good roads and river or sea navigation for the transport of merchandise, we should take into consideration the method of constructing the walls and towers of the city. These foundations should be carried down to a solid bottom (*cf. Mānasāra* under GARBHA-NYĀSA) if such can be found, and should be built thereon of such thickness as may be necessary for the proper support of that part of the wall which stands above the natural level of the ground. They should be of the soundest workmanship and materials, and of greater thickness than the walls above. From the exterior face of the wall, towers must be projected, from which an approaching enemy may be annoyed by weapons, from the ambrasures of those towers, right and left. An easy approach to the walls must be provided against ; indeed they should be surrounded by uneven ground, and the roads leading to the gates be winding and turn to the left from the gates. By this arrangement the right side of the attacking troops, which are not covered by their shields, will be open to the weapons of the besieged.'

'The plan of the city should not be square, nor formed with acute angles, but polygonal, so that the motions of the enemy may be open to observation. . . .'

'The thickness of the walls should be sufficient for two armed men to pass each other with ease. The walls ought to be tied, from front to rear, with many pieces of charred olive wood; by which means the two faces, thus connected, will endure for ages.'

'The distance between each tower should not exceed an arrow's flight. . . . The walls will be intercepted by the lower parts of the towers

where they occur, leaving an interval equal to the width of the tower ; which space the tower will consequently occupy. The towers should be made either round or polygonal. A square (tower) is a bad form, on account of its being easily fractured at the quoins by the battering ram ; whereas the circular tower has this advantage, that when battered, the pieces of masonry whereof it is composed being cuneiform, they cannot be driven in towards their centre without displacing the whole mass. Nothing tends more to the security of walls and towers than backing them with walls or terraces ; it counteracts the effects of rams as well as of undermining.'

' In the construction of ramparts, very wide and deep trenches are to be first excavated ; the bottom of which must be still further dug out for receiving the foundation of the wall. This must be of sufficient thickness to resist the pressure of the earth against it. Then, according to the space requisite for drawing up the cohorts in military order on the ramparts, another wall is to be built within the former, towards the city. The outer and inner walls are then to be connected by cross walls, disposed on the plan after the manner of the teeth of a comb or a saw, so as to divide the pressure of the filling in earth into many and less forces, and thus prevent the walls from being thrust out.' The materials are stated to be ' what are found in the spot : such as square stones, flint, rubble stones, burnt or unburnt bricks.'—(*Vitruvius*, Book I, Chap. v.)

' The lanes and streets (of which no details are given) of the city being set out, the choice of sites for the convenience and use of the state remains to be decided on ; for sacred edifices, for the forum, and for other public buildings. If the place adjoin the sea, the forum should be seated close to the harbour ; if inland it should be in the centre of the town. The temples of the gods, protectors of the city, as those of Jupiter, Juno, and Minerva, should be on some eminence which commands a view of the greater part of the city. The temple of Mercury should be either in the forum or, as also the temple of Isis and Serapis in the great public square ; those of Apollo and Father Bacchus near the theatre. If there be neither amphitheatre nor gymnasium, the temple of Hercules should be near the circus. The temple of Mars should be out of the city, in the neighbouring country ; that of Venus near to the gate. According to the revelations of the Hetrurian Haruspices, the temples of Venus, Vulcan and Mars should be so placed that those of the first be not in the way of contaminating the matrons and youth with the influence of lust ; that those of the Vulcan be away from the city, which would consequently freed from the danger of fire ; the divinity presiding over that element bring drawn away by the rites and sacrifices performing in his temple.

The temple of Mars should be also out of the city, that no armed frays may disturb the peace of the citizens, and that this divinity may, moreover, be ready to preserve them from their enemies and the perils of war. The temple of Ceres should be in a solitary spot out of the city, to which the public are not necessarily led but for the purpose of sacrificing to her. This spot is to be reverenced with religious awe and solemnity of demeanour by those whose affairs lead them to visit it. Appropriate situations must also be chosen for the temple and places of sacrifice to the other divinities.'—(*Vitruvius*, Book I, Chap. VII.)

(13) Vijitya viśvaṁ vijayābhidhanāṁ viśvottarāṁ yo nagariṁ vyadhatta ।
Yā hema-kuṭaṁ nija-śāla-bāhu-latā-chhaleneva parishvajantī ॥
Yat-prākāra-śikhāvali-parilasat - kiñjalka - puñjāchitaṁ yach chhākā-pura-jāla-nachitaṁ sad-danti-bhṛiṅgānvitam ।
Sphāyad yat-parikhā-jala-prati-phalad yat-prānta-pṛithvī-dhara-chchhāyā-nālam idaṁ purābjam naiśaṁ lakshmyā sahālambate ॥

'Having conquered all the world, he (Bukka-Rāja) built a splendid city called the City of Victory (Vijayanagarī). Its four walls were like arms stretching out to embrace Hema-kuṭa. The points of the battlemants like its filaments, the suburbs like its blossom, the elephants like bees, the hills reflected in the water of the moat like stems,—the whole city resembled the lotus on which Lakshmī is ever seated.'—(*Ep. Carnat.*, Vol., v, Part 1, Channarayapatna Taluq, no. 256 ; Roman Text, p. 521, lines 1–6 ; Transl., p. 732, para. 2, line 4.)

(14) Grāma - nagara - kheda - karvvada - madaṁba - droṇa - mukha - pat tanaṁ galiṁdam aneka-māṭa-kuṭa-prāsāda-devāyatanaṁga-lidam oppuva-agrahāra-paṭṭa-ṇaṁgaliṁdam atiśayav-apya.

[At Tridāla, a merchant-town situated in the centre and the first in importance among the twelve (towns) in the glorious Kundi Three-Thousand, adorned with] 'villages, towns, hamlets, villages surrounded by hills, groups of villages, sea-girt towns, and chief cities, with elegant mansions, palaces and temples, and with shining agrahāra towns in the country of Kuntala.'—(Old Kanarese Inscrip. at Terdal, line 58, *Ind. Ant.*, Vol. XIV, pp 19, 25.)

(15) 'With myriads of people, practices of virtue, agreeable occupations, streams of the (nine) sentiments, pleasure gardens, separated lovers, splendid tanks, full lotus beds, gilded boats for spring festivals,

ghaṭikā-sthānas (religious centres), the supports of dharmma and mines of enjoyment, moats which were as if the sea being overcome had returned here on account of the collection of gems, groups of the lotus faces of beautiful women fair as the moon (grāma-nagara-kheda kharvvaṇa-madamba-droṇa-mukha-pura-pattana-rāja-dhānī) on whatever side one looked, in these nine forms did the Kunṭala-deśa shine.'

(It should be noticed that the passages within brackets is almost indentical with the corresponding passage in quotation no. 14 above.—*Ep. Carnat.*, Vol. VII, Shikārpur Taluq, no. 197; Transl., p. 124, para. 1, last seven lines; Roman Text, p. 214, line 27 f.)

(16) 'Visiting' the grāmas, nagaras, khedas, kharvvaḍas, maḍambas, paṭṭanas, droṇa-mukhas and saṁvāhanas,—the cities of the elephants at the cardinal points.'—(*Ep. Carnat.*, Vol. VII, Shikārpur Taluq, no. 118; Transl., p. 86, last para., line 14.)

(17) 'Thus entitled in many ways to honour, residents of Ayyavole Challunki and many other chief grāmas, nagaras, khedas, kharvvaḍas maḍambas, droṇa-mukhas, puras, and pattanas, of Lāla Gauḍa, Bangāla Kāśmira, and other countries at the points of the compass.'—(*Ibid*, no. 119, Transl., p. 90, para. 6.)

NANDANA (*cf.* NANDA-VṚITTA)—A storeyed building, a pavilion.

A type of building which has six storeys and sixteen cupolas (aṇḍa), and is 32 cubits wide:

(1) *Bṛihat-Saṁhitā* (LVI, 22, *J.R.A.S.*, N. S., Vol. VI, p. 319; *see* under PRĀSĀDA).

(2) *Matsya-Purāṇa* (Chap. CCLXIX, v. 29, 33, 48, 53; *see* under PRĀSĀDA).

(3) *Bhavishya-Purāṇa* (Chap. CXXX, v. 29; *see* under PRĀSĀDA).

A type of quadrangular building:

(4) *Garuḍa-Purāṇa* (Chap. XLVII, v. 242–5; *see* under PRĀSĀDA).

(5) A pavilion with thirty pillars (*Matsya-Puraṇa*, Chap. CCLXXIII, v. 12; *see* under MAṆḌAPA, and compare *Suprabhedāgama*, under NANDA-VṚITTA).

NANDA-VṚITTA—An open pavilion, gracefully built with sixteen columns.

(*Suprabhedāgama*, XXXI, 101; *see* under MAṆḌAPA.)

NANDI-MAṆḌAPA (*see* under MAṆḌAPA)—A pavilion.

See Pallava Architecture.

(*Arch. Surv.*, New Imp. Serirs, Vol. XXXIV plate LXIX, fig. 4.)

NANDYĀVARTA—A type of building where rooms are surrounded with terraces, a village, a window, a pavilion, a phallus, a ground-plan, an entablature (*see* under PRASTARA), a joinery (*see* under SANDHI-KARMAN).

(1) *Mānasāra* :

A class of the six-storeyed buildings (*M.*, XXIV, 24; *see* under PRĀSĀDA).

A class of villages (*M.*, IX, 2; *see* under GĀMA).

A kind of joinery (*M.*, XVII, 54; *see* under SANDHI-KARMAN).

A type of window (*M.*, XXXIII, 583; *see* under VĀTĀYANA).

A type of four-faced pavilion (*M.*, XXXIV, 555; *see* under MAṆḌAPA).

In connexion with the phallus (*M.*, LII, 177; *see* under LIṄGA).

In connexion with the site-plan (*M.*, VIII, 35; *see* under PADA-VINYĀSA).

(2) Nandyāvartam alinḍaiḥ śālā-kudyāt pradakshiṇāntargataiḥ |
Dvāraṁ paśchimam asmin vihāya śeshaṁ kāryāṇi ||

'Nandyāvarta is the name of a building with terraces that from the wall of the room extends to the extremity in a direction from east to south (alias from left to right). It must have doors on every side, except the west.'—(*Bṛihat-Saṁhitā*, LIII, 32, *J.R.A.S.*, N. S., Vol., VI, p. 285.)

(3) Sarvatobhadram ashṭāsyaṁ vedāsyaṁ vardha-mānakam ||
Dakshiṇe chottare chaiva shaṇ-netraṁ svastikaṁ matam |
Pārśvayoḥ puratash chaiva chatur-netra-samāyutam ||
Nandyāvartaṁ smṛitaṁ purve dakshiṇe paśchime tathā |
Uttare saumya-śāladi śālānām āsyam īritam ||

(*Kāmikāgama*, XXXV, 88, 89, 90.)

An entablature (*ibid.*, LIV. 7).

Ibid., XLI (named Nandyāvarta-vidhi : 1–37) :

The three sizes (1–6), and the four classes, namely, jāti, chhanda, vikalpa and ābhasa (7–9) :

Nandyāvartaṁ chatush-paṭṭam mulenātra vihīnakam |
Dvāraṁ chatushṭayaṁ vāpi yātheshṭha- diśi vā bhavet || (7)
Jalakaś cha kavāṭaś cha bāhye bāhye prakalpayet |
Sarvataḥ kuḍya-saṁyuktaṁ mukhya-dhāmātra kīrtitam || (8)
Antar-vivṛita-pādaṁ cha bāhye kuḍyaṁ prakīrtitam |
Chatur-dikshu vinishkrāntam ardha-kuṭaṁ prayojayet ||
Daṇḍika-vāra-saṁyuktaṁ jāti-rupam idaṁ matam || (9)

The other details of this and the remaining three classes and the sub-classes are also given (10–36) :

Evaṁ shodaśadhā proktaṁ nandyāvartaṁ dvijottamāḥ || (37)

(4) A class of buildings :

. . . Nandyāvartam iti śṛiṇu ।
Chatush-kuṭāś chatuḥ-śālāś chatvāraḥ pārśva-nāsikāḥ ॥
Mukha-nāsi tathā yuktaṁ dvā-daśaṁ chānu-nāsikaḥ ॥
Chatuḥ-sopāna-saṁyuktaṁ bhūmau bhūmau viśeshataḥ ॥
Nandyāvartam idam vatsa. . . .

(*Suprabhedāgama*, XXXI, 48, 49, 50.)

A pavilion with 36 columns (*ibid.*, XXXI, 103 ; *see* under MAṆḌAPA).

NANDIKA—A type of quadrangular building.

(*Agni-Purāṇa*, Chap. CIV, VV. 14–15 ; *see* under PRĀSĀDA.)

NANDI-VARDHANA—A type of building.

(1) A kind of building which is shaped like the sun-eagle, but is devoid of the wings and tail, has seven storeys and twenty cupolas, and is 24 cubits wide :

Garuḍākṛitiś cha garuḍa nandīti cha shaṭ-chatushka-vīstīrṇaḥ ।
Kāryaś cha sapta-bhaumo vibhūshito'ṇḍaiś cha viṁśatyā ॥

Commentary quotes the clearer description from *Kāśyapa* :

Garuḍo garuḍākāraḥ paksha-puchchha-vibhūshitaḥ ।
Nandī tad-ākṛitir jñeyaḥ pakshādi-rahitaḥ punaḥ ॥
Karāṇāṁ shaṭ-chatushkāṁś cha vistīrṇau sapta-bhūmikau ।
Daśabhir dvi-guṇair aṇḍair bhūshitau kārayet tu tau ॥

(*Bṛihat-Saṁhitā*, LVII, 24 ; *J.R.A.S.*, N. S., Vol. VI, p. 319.)

(2) *Matsya-Purāṇa* (Chap. CCLXIX, VV. 33, 48, 53 ; *see* under PRĀSĀDA).

(3) *Bhavishya-Parāṇa* (Chap. CXXX, VV. 28, 31 ; see under PRĀSĀDA).

A kind of quadrangular building :

(4) *Agni-Purāṇa* (Chap. CIV, VV. 14–15 ; *see* under PRASĀDĀ).

(5) *Guruḍa-Purāṇa* (Chap. XLVII, VV. 24–35 ; *see* under PRĀSĀDA).

NAPUṀSAKA (*cf.* STRĪLIṄGA and PUṀLIṄGA)—A neuter type of building (*see* under PRĀSĀDA).

Cf. Pañcha-varga-yutaṁ miśram arpitānarpitāṅgakam ।
Pāshaṇḍāṇāṁ idaṁ śastam napuṁsaka-samanvitam ॥

(*Kāmikāgama*, XLI, 11.)

For the meaning of pañcha-varga, *see ibid.*, XXXV, 21, under SHAḌ-VARGA.

NABHASVĀN—A class of chariots.

(*M.*, XLIII, 112 ; *see* under RATHA.)

NAYANONMĪLANA—Chiselling the eye of an image ; sculpturally it would imply the finishing touch with regard to making an image.

For details, *see M.*, LXX (named *Nayanonīlana*) 1–114.

NARA-GARBHA—The foundation of residental buildings.

(*See* details under GARBHA–NYĀSA.)

NALĪNAKA—A class of buildings distinguished by open quadrangles and surrounded by buildings, and furnished with platforms and stairs.

Chatuḥ-śālā-samāyukto vedi-sopāna-saṁyutaḥ ।
Nalīnakas tu saṁprokta(-taḥ) . . . ॥

(*Suprabhedāgama*, XXXI, 46.)

NAVA-TALA—The nine-storeyed buildings (*M.*, XXVII, 2–47) ; the description of the ninth storey (*ibid.*, 35–47) ; seven classes (2–33) (*see* under PRĀSĀDA).

NAVA-TĀLA—A sculptural measurement in accordance with which the whole length of an image is nine times the height of the face which is generally twelve aṅgulas (nine inches) ; this length is divided into $9 \times 12 = 108$ equal parts which are proportionally distributed over the different limbs. (*See* under TĀLAMĀNA.)

Cf. Nava-tāla-pramāṇas tu deva-dānava-kinnarāḥ ।

(*Matsya-Purāṇa*, Chap. CCLVIII, v. 16.)

Evaṁ nārīshu sarvāsu devānaṁ pratimāsu cha ।
Nava-tālaṁ proktaṁ lakshaṇaṁ pāpa-nāśanam ॥

(*Ibid.*, v. 75.)

The details of this system of measure employed both for male and female statues are given. (*Ibid.*, vv. 26–74.)

NAVA-BHŪMI (same as NAVA-TALA)—Nine-storeyed buildings, the ninth storey (*see* NAVA-TALA).

NAVA-RAṄGA (*see* SAPTA-RAṄGA)—A detached pavilion (with 108 columns).

(1) Sālindaṁ nava-raṅgaṁ syād ashṭottara-śatāṅghrikam ।

(*M.*, XXXIV, 107.)

(2) Koneri ' erected a nava-raṅga of 10 aṅkaṇas, with secure foundation and walls, for the god Tirumala of the central street of Maḷalavādi.'—(*Ep. Carnat.*, Vol. IV, Hunsur Taluq, no. I ; Transl., p. 83 ; Roman Text, p. 134.)

(3) Śāntigrāmada nava-raṅgada kalla-bāgilann kaṭṭisi huli-mukha-van—(Deva Mahārāya) ' caused the stone gateway of Sāntigrāma to be constructed and ornamented with the tiger-face. (This work was carried out by Siṅgaṇahe-bāruva of the village).'—(*Ep. Carnat.*, Vol. v, Part I, Hassan Taluq, no. 17 ; Roman Text, p. 75 ; Transl., p. 34.)

(4) Śrī-gopāla-svāmiyavara nava-raṅga-paṭṭa-śāle-prākāravanu kaṭṭisi—for the god Gopāla ' he erected a nava-raṅga-paṭṭa-śāle (a nava-raṅga and a paṭṭaśālā, *see* below) and an enclosure wall (and promoted a work of merit).'

Nava-raṅga-prākāra-paṭṭa-śāle-samasta-dharmma—' this nava-raṅga, enclosure wall, paṭṭa-śālā and all the work of merit were carried out. . . .'—(*ibid*, Channarayapatna Taluq no. 185; Roman Text, p. 467 lines 8, 17 ; Transl., p 205.)

(5) Compare Sapta-raṅga (at Comilla in Bengal) which is a pagoda-shaped detached building of seven storeys built on the right side of the raṅga-maṇḍapa, another detached building, facing the front side of the main shrine or temple of the god Jagannātha. All these buildings and the tank behind the shrine are within the enclosing wall (prākāra).

(6) ' It (Malleśvara temple at Hulikat) faces north and consists of a garbha-gṛiha, an open sukha-nāsi, a nava-raṅga, and a porch. The garbha-gṛiha, sukha-nāsi and porch are all of the same dimensions being about 4½ feet square, while the nava-raṅga measures 16 feet by 14 feet. '—(*Mysore Arch. Report*, 1915–16, p. 4, para. 10 ; *see also* p. 5, para. 12, Plate III, fig. 2.)

' The nava-raṅga is an open hall with two rows of four pillars at the side, all the pillars except two being carved with large female figures in relief in the front. '—(*Ibid.*, p. 15, para. 19.)

NAVA-RATNA—Nine gems, ruby (padma-rāga), diamond (vajra), coral (vidruma), sapphire (nīla), topaz (pushpa-rāga), emerald (marakata), pearl (muktā), lapis lazuli (sphaṭika), and gomedaka.

(*M.*, XVIII, 390—394.)

NĀGA—Supernatural beings, ' snake-demons, sometimes represented in human form with a snake's hood in the nake, sometimes as mixed forms, half man, half snake. Their sworn enemies are Garuda. '

(W. Gieger : *Mahavaṁsa*, p. 294 ; Grünwedel : Buddhist Kunst, p. 42, fol.)

NĀGA-KALA—A stone on which the image of a serpent is carved.

(*See* Chālukyān Architecture *Arch. Surv.*, New Imp. Series, Vol. XXI, p. 39, Plates XCIX, fig. 2 ; XC, figs. 2, 3.)

NĀGA-BANDHA—A kind of window resembling the hood of a cobra.

(*M.*, XXXIII, 582 ; *see* under VĀTĀYANA.)

NĀGARA—One of the three styles of architecture; it is quadrangular in shape, the other two (Vesara and Drāviḍa) being respectively round and octagonal.

(1) *Mānasāra* :

The characteristic feature of the three styles :

Mūlādi-stūpi-paryantaṁ vedāśraṁ chāyatāśrakam ।
Dvyaśraṁ vṛittākṛitaṁ vātha grīvādi-śikharākṛitiḥ ।
Stūpi-karṇa-saṁyuktaṁ dvayaṁ vā chaikam eva vā ।
Chatur-aśrākṛitiṁ yas tu Nāgaraṁ tat prakīrtitam ।
Mulāgraṁ vṛittam ākāraṁ tad yat āyatam eva vā ।
Grīvādi-stūpi-paryantaṁ yuktātho (-dhas) tad yugāsrakam ।
Vṛittasyāgre dvyaśrakaṁ tad Vesara-nāmakaṁ bhavet ।
Mulāgrāt stūpi-paryantam ashṭāśram vā shaḍ-aśrakam ।
Tad-agraṁ chāyataṁ vāpi grīvasyādho yugāśrakam ।
Pūrvavach chordhva-deśaṁ syād Drāviḍaṁ tat prakīrtitam ।
Samāśraika-śikhā-yuktaṁ chāyāme tach-chhikhā-trayam ।
Dryaśra-vṛittopari-stūpi vṛittaṁ vā chatur-aśrakam ।
Padmādi-kuḍmalāntaṁ syād uktavad vākṛiti(ṁ) nyaset ।

(*M.*, XVIII, 90–102.)

Compare Vishṇu-dharmottara (a supplement to the *Vishṇu-Purāṇa*), Part III, Chap. XLI, where *paintings* are divided into four classes—Satya, Vainika, Nāgara and Miśra. (*Cf.* S. Kramrisch : *A Treatise on Indian Painting and Image-making*, 1928, pp. 8, 51 ; A. K. Coomaraswamy's article, *Rupam*, January, 1929.)

The Nāgara style is distinguished by its quadrangular shape, the Vesara by its round shape and the Drāviḍa by its octagonal or hexagonal shape :

See Suprabhedāgama below and compare :

(Referring to the pedestal of the pallus) :

Nāgaraṁ chatur-asram ashṭāśraṁ Drāviḍaṁ tathā ।
Vṛittaṁ cha Vesaraṁ proktam etat pīṭhākṛitis tathā ।

(*M.*, LIII, 53–54.)

These distinguishing features are noticed generally at the upper part of a building :

Grīva-mastaka-śikhā-pradeśake ।
Nāgarādi-samalaṅkṛitoktavat ।—(*M.*, xxi, 71–72.)
Nāgara-Drāviḍa-Vesarādīn(-dīnāṁ) śikhānvitam (harmyam) ।

(*M.*, xxvi, 75.)

Referring to chariots (ratha):

Vedāśraṁ Nāgaraṁ proktaṁ vasvaśraṁ Drāviḍaṁ bhavet ।
Suvṛittaṁ Vesaraṁ proktaṁ ra(A)ndhraṁ syāt tu shaḍ-aśrakam ।—(*M.*, xliii, 123–124.)

An important addition is noticed in this passage; this style is designated as Randra, which is perhaps a corruption of Andhra.

In an ephigraphical record Kaliṅga also is mentioned as a distinct style of architecture (*see* below).

If the identification of Vesara with Telugu or Tri-kaliṅga is accepted (*see* below), and if the reading Andhra for Randhra is also accepted, the Kaliṅga and the Andhra would be two branches of Vesara. And as the Drāviḍa style is stated to be of the hexagonal or octagonal shape (*see* above) it would appear that the Drāviḍa proper is octagonal and the Andhra, which is placed between the Drāviḍa and the Vesara, is hexagonal (*see* further discussion below).

The same three styles are distinguished in sculpture also:

(Liṅgaṁ) Nāgaraṁ Drāviḍaṁ chaiva Vesraṁ cha tridhā matam ।

(*M.*, liii, 76, also 100.)

Kuryāt tu nāgare liṅge pīṭham Nāgaraṁ eva cha ।
Drāviḍe Drāviḍaṁ proktaṁ vesare Vesaraṁ tathā ।

(*Ibid.*, 46–47, etc.)

(2) *Śilparatna* of Śrikumara (xvi, 51–53) :

Mūlādi-śikharaṁ yugāśra-rachitaṁ geha smṛitaṁ nāgaraṁ ।
Mūlādi-śikhara-kṛiyaṁ shaduragaśrodbheditaṁ drāviḍam ।
Mūlād vā galato'thavā parilasat-vṛittātmakaṁ vesaraṁ ।
Teshvekaṁ pṛithagallākshma suridadadhyādātmanaḥ sammatam ॥ (51)
Janmādi-stūpiparyantaṁ yugāśraṁ nāgaraṁ bhavet ।
Vasvaśraṁ śirshakaṁ karṇaṁ (kaṇṭhaṁ) drāvidaṁ bhavanaṁ viduḥ ॥ (52)
Vṛitta-karṇa (kaṇṭha)-śiropetaṁ vesaraṁ harmamīritam ।
Kūṭa-koshṭhādi-hīnānāṁ harmyāṇaṁ kathiṁ tvidaṁ ॥ (53)

This treatise locates Nāgara region from the Himalayas to the Vindhyas, Drāviḍa region from the Vindhyas to the Kṛishṇa, and Vesara region from the Kṛishṇa to the Cape Comorin (*see* verses 40–50).

But it expressly says (v. 44) that buildings of all these styles may be found in all countries according to some authorities. This is quite natural and would further indicate the migration of styles from the land of their origin.

The unwarranted assumption of Messrs. F. H. Gravely and T. N. Ramachandran, in the Bulletin of the Madras Government Museum (New Series—General Section, Vol. III, Part 1, 1934), that all *Śilpa-śastras* including the *Mānasāra* originated and restricted their jurisdiction in the South, is responsible for a series of further assumptions raised like a house of cards. Under the plea of ' Three Main Styles of temple Architecture ' the authors of this article of 26 pages deliberately ignored both the references to other objects of these styles as also the examination of North Indian buildings of Nāgara style except a passing mention of a single structure at Bareilly District and excluded the places north of the Vindhya range which are known by the name of Nāgara. The alternative designations of Vesara style by Andhra and Kāliṅga have equally been ignored. Thus the learned authors had to delimit the Indian Continent by the Vindhya range of limited eastern boundary as the northern limit, and of this truncated India, Drāviḍa being the south and Nāgara and Vesara the two northern flanks. There was no necessity for any discussion to explain the mixture of Pallava and Chalukyan types. The migration of styles also is very common and natural in architecture.

The contention that the styles, Nāgara, Vesara, Drāviḍa, all belong to the south has been disproved by Dr. S. K. Aiyangar (*Journal of the Indian Society of Oriental Art*, Vol. 11, no. 1, June 1934, pp. 23–27) : ' the primary division is Nāgara, India north of the Vindhyas, Vesara, India between the Vindhyas and the Kṛishṇa, corresponding to Dakhan of secular history, and Drāviḍa or India south of the Kṛishṇa corresponding to Tamil India, ' . . . ' But in regard to Vesara from Veśya, Mr. Jayaswal (*J. I. S. O. A.*, Vol. 1, no. 1, p. 57) has little authority to rest on '. . . . ' our derivation may fail or may prove satisfactory, but that is something entirely different from what the artist or the craftsman understood by the terms '. . . . ' That they (Nāgara, Vesara, Drāviḍa) had no territorial significance would be to argue too much, in the face of the explicit statement by the text writers.'

(3) *Kāmikāgama* (LXV, 6–7, 12–18) :

Pratyekaṁ tri-vidhaṁ proktaṁ saṁchitaṁ chāpy-asaṁchitam ।
Upasaṁchitam ity-evaṁ Nāgaraṁ Drāviḍaṁ tathā ॥ (6)
Veśaraṁ cha tathā jātiś chhando vaikalpam eva cha ॥ (7)
Savistāra-vaśāch chhanna-hasta-purṇāyātānvitam ।

Yugmāyugma-vibhāgena Nāgaraṁ syāt samīkṛitam ॥ (12)
Antara-prastaropetam ūha-pratyūha-saṁyutam ।
Nivra-sandhāra-saṁstambha-vrāte pariḍṛiḍhaiḥ śubhaih ॥ (13)
Drāviḍaṁ vakshyate' thātaḥ vistāra-dvayorghakam (?) ।
Raktāchchhanna-pratikshepāt yugmāyugma-viśeshataḥ ॥ (14)
Hitvā tatra samībhūtaṁ bhadrālaṅkāra-saṁyutam ।
Aneka-dvāra-saṁyuktaṁ shaḍ-vargaṁ Drāviḍaṁ smṛitam ।
Labdha-vyāsāyataṁ yat tu nātiriktaṁ na hīnakam ।
Bahu-varga-yutaṁ vāpi daṇḍikā-vāra-śobhitam ॥ (16)
Mahā-vāraṁ vimānordhve nirvūhānana-saṁyutam (?) ।
Sakshetropeta-madhyāṁghri-yuktaṁ tad Vesaram matam ॥ (17)
Yatīnāṁ gaṇikānāṁ cha jīvināṁ krura-karmaṇaḥ ।
Praśastaṁ Vesaraṁ teshāṁ anyeshām itare śubhe ॥ (18)

The details of the three styles are described more briefly but explicitly in the following *Āgama* :

(4) *Suprabhedāgama* (xxxi, 37–39):

Dvāra-bhedam idaṁ proktaṁ jāti-bhedaṁ tataḥ śṛiṇu ॥ (37)
Nāgaraṁ Drāviḍaṁ chaiva Vesaraṁ cha tridhā matam ।
Kaṇṭhād ārabhya vṛittaṁ yad Vesaram iti smṛitam ॥ (38)
Grīvam ārabhya chāshṭāṁśaṁ vimānaṁ Drāviḍākhyakam ।
Sarvaṁ vai chaturaśraṁ yat prāsādaṁ Nāgarāṁ tu-idam ॥ (39)

According to this *Āgama*, the buildings of the Nāgara style are quadrangular from the base to the top ; those of the Drāviḍa style are octagonal from the neck to the top ; and those of the Vesara style are round from the neck to the top. Apparently the lower part of the buildings of the two latter styles is quadrangular.

(5) Svair aṅgula-pramāṇair dvā-daśa-vistīrṇam āyataṁ cha mukham :
Nagnajitā tu chatur-daśa dairghyeṇa Drāviḍa(ṁ) kathitam ॥

According to one's own aṅgula (finger) the face (of his own statue) is twelve aṅgulas long and broad. But according to (the architect) Nagnajit it should be fourteen aṅgulas in the Drāviḍa style.

The commentary quotes Nagnajit in full :

Vistīrṇaṁ dvā-daśa-mukhaṁ dairghyeṇa cha chatur-daśa ।
Aṅgulāni tathā kāryaṁ tan-mānaṁ Drāviḍaṁ smṛitam ॥

The face should be twelve aṅgulas broad and fourteen aṅgulas long : such a measure is known as Drāviḍa (i. e., this is the Draviḍa style of measurement).—(*Bṛihat-Saṁhita*, lviii, 4, *J.R.A.S.*, N. S., Vol. vi, p. 323, note 3.)

(6) ' Like the face of the lady Earth shone the Vanavāse-nād on which Nāgara-khaṇḍa at all times was conspicuous like the tilaka, a sign of good

fortune (then follows a description of its groves, gardens, tanks, etc.). In the Nāgara-khaṇḍa shone the splendid Bāndhavanagara.'

'In Nāgara-khaṇḍa, like the mouths of Hara, were five agrahāras, from which proceeded the sounds of all Brāhmaṇs reading and teaching the reading of all the Vedas, Purāṇas, moral precepts, śāstras, logic, āgamas, poems, dramas, stories, smṛiti, and rules for sacrifices.'—(*Ep. Carnat.*, Vol. VII, Shikarpur Taluq, no. 225 ; Transl., p. 132, paras. 6, 7 ; Roman Text, p. 229, line 24 to p. 235, line 2.)

(7) 'In the world beautiful is the Kuntala-land, in which is the charming Vanavāsa country ; in it is the Nāgara-khaṇḍa, in which was the agreeable Bāndhavapura. (The list of its trees and other attractions.) In that royal city (rājadhāni) was formerly a king of that country famed for his liberality Sovi-deva.'—(*Ibid.*, no. 235 ; Transl., p. 135, para. 2 ; Roman Text, p. 238, line 20, f.)

(8) Nāgari-khāṇḍa and Nāgari-khaṇḍa (*ibid.*, no. 236 ; Transl., p. 137, paras. 3, 4), Nāgara-khaṇḍa seventy (no. 240 ; Transl., p. 138), Nāgara-khaṇḍanāḍa (no. 241 ; Transl., p. 138), Nāgara-khaṇḍa (no. 243 ; Roman Text, p. 248, line 8), Nāgara-khaṇḍa seventy (no. 267 ; Transl., p. 143, last para., line 7), Nāgari-khaṇḍa seventy (no. 277 ; Transl., p. 145, largest para., line 5).

(9) Nāgara-bhuktau vālavī-vaishayika-śaiva . . . padraḷik (? ksh) āntāsh-pati Vāruṇikā-grāma—" Of the village of Vāruṇikā, which lies . . . in the Nāgara bhukti (and) belonging to the Vālavi-vishaya.'—(Deo Baranark Inscrip. of Jivitagupta II, lines 6–7 : *C. I. I.*, Vol., III, F. G. I. no. 46, pp. 216, 218.)

(10) 'When that king (king Harihara's son Deva-Rāya) of men was ruling the kingdom in peace and wisdom, shining in beauty beyond all countries was the entire Karṇṇāṭa province ; and in that Karṇṇāṭa country famous was the Gutti-nāḍ, which contained eighteen Kampaṇas in which the most famous nāḍ was " Nāgara-khaṇḍa " to which Kuppaṭūr was an ornament, owing to the settlement of the Bhavyas (or Jains), and its Chaityālayas, beautiful with lotus ponds, pleasure gardens and fields of gandha-śāli rice. (Further description of its attractions).'—(*Ep. Carnat.*, Vol. VIII, Part I, Sorab Taluq, no. 261 ; Roman Text, p. 82 ; Transl., p. 41.)

(11) 'In the island of Jambu trees (Jambu-dvīpa), in the Bharata-kshetra, near the holy mountain (Śrīdhara), protected by the wise Chandragupta, an abode of the good usages of eminent Kshatriyas, filled with a population worthy of gifts (dakshiṇā-pātra), a place of unbroken wealth, was the district (vishaya) named Nāga-khaṇḍa of good fortune, possessed of all comforts, and from being ever free from destruction (laya) of the wise, called Nilaya (an asylum). There, adorned with gardens of various fruit trees

(named), shines the village named Kuppaṭūr, protected by Gopeśa. There like the forehead-ornament to the wife, in the territory of king Harihara, was a Jīna Chaityālaya which had received a śāsana from the Kadambas.'—(*Ep. Carnat.*, Vol. VIII, Part I, Sorab Taluq, no. 263 ; Roman Text, p. 86 ; Transl., p. 43.)

The identity of Nāgara-khaṇḍa with Nāga-khaṇḍa is undoubted owing to the fact that the one and same village Kuppaṭūr is contained in both.

(12) 'The headman of Pīṭhamane village, the first in the Kuppaṭūr Twenty-six of the Nāgara-khaṇḍa Malu-nāḍ, belonging to the Chandragutti-venṭhe, of the Banavāsi Twelve Thousand in the South country . . .—(*Ibid.*, no. 265 ; Roman Text, p. 87,Transl., p. 43).

(13) 'In Jambudvīpa, in the Karṇṇāṭaka-vishaya, adorned with all manner of trees (named) is Nāgara-khaṇḍa.'—(*Ibid.*, no. 329 ; Transl., p. 58, para. 2, line 4.)

(14) The expression 'Nāgara-khaṇḍa Seventy' occurs in several of the Sorab Taluq Inscriptions, e.g., nos. 326, 327, 328, 336, 337, etc.

'To the ocean-girdled earth like a beautiful breast formed for enjoyment was Nāgara-khaṇḍa in the Banavāsi-maṇḍala.'—(*Ibid.*, no. 345 ; Transl. p. 60.)

(15) 'In the ocean-girdled Jambu-diva (dvīpa) is the Mandara mountain to the south of which is the Bharata-kshetra, in which is . . . wherein is the beautiful Nāgara-khaṇḍa. Among the chief villages of that nāḍ is the agrahāra named Kuppaṭūra.'

'Grants were also made (as specified) by the oil-mongers, the betel-sellers and the gaṇḍas(?) of Nāgara-khaṇḍa for the perpetual lamp.'—(*Ibid.*, no. 276 ; Transl., p. 47.)

(16) 'In the pleasant Nāgara-khaṇḍa is the agrahāra which is jewel mirror to the earth, the beautiful Kuppaṭūr, with its splendid temples, its golden towers, its lofty mansions, its streets of shops, its interior surrounded with a moat, its . . ., and the houses of dancing girls,—how beautiful to the eyes was Kuppaṭūr. It surpassed Alakāpura, Amarāvatī and Bhogavatī. Within that village, vying with Kailāśa, stood the temple of Koṭinatha, built by Viśvakarmmā and carved with complete devotion, planned in perfect accordance with the many rules of architecture, and freely decorated with *drāviḍa, bhumija* and *nāgara.*' 'These and bhadropeta appear to be technical terms of the *Śilpa-śāstra* or science of architecture.'—Mr. Rice.

(They are evidently the three styles of architecture called the Drāviḍa, Vesara and Nāgara in the *Mānasāra* and elsewhere—*Ep. Carnat.*, Vol. VIII, Part I ; Sorab Taluq, no. 275 ; Roman Text, p. 92, line 9 from bottom upwards ; transl., p. 46, note 1.)

(17) 'The earliest Vijayanagar inscription (Sb. 263, noted above) contains the interesting statement that the district (vishaya) named Nāga-khaṇḍa

generally Nāgara-khaṇḍa, corresponding more or less with the Shikārpur Taluq was (formerly) protected by the wise Chandragupta, an abode of the usages of eminent Kshatriyas.'—(*Ep. Carnat.*, Vol., VIII, Part I ; Introduction, p. 11, para. 5.)

(18) The Sorab Taluq Inscriptions (no. 261 f.) have reference to Nāgara-khaṇḍa and its pompous buildings (temples), picturesque gardens and other natural and artificial beauties. From these it may be inferred that the buildings of Nāgara-khaṇḍa possessed, as stated in the *Mānasāra*, a distinct style of architecture like those of the Drāviḍa and Vesara countries.

(19) Compare Fah Hian's Kingdom of the Dakshiṇa (*Ind. Ant.*, Vol., VII, pp. 1–7, note 2) :

> 'Going two hundred yojanas south from this, there is a country called Ta-thsin (Dakshiṇa). Here is a Saṅghārāma of the former Buddha, Kāśyapa. It is constructed out of a great mountain of rock hewn to the proper shape. This building has altogether five storeys. The lowest is shaped into the form of an elephant, and has five hundred stone cells in it. The second is in the form of a lion and has four hundred chambers. The third is shaped like a horse, and has three hundred chambers. The fifth storey is in the shape of a dove, and has one hundred chambers in it. At the very top of all is a spring of water, which flowing in a stream before the rooms, encircles each tier and so, running in a circuitous course, at last arrives at the very lowest storey of all, where, flowing past the chambers as before, it finally issues through the door of the building. Throughout the consecutive tiers, in various parts of the building, windows have been pierced through the solid rock for the admission of light, so that every chamber is quite illuminated, and there is no darkness (throughout the whole). At the four corners of this edifice they have hewn out the rock into steps, as a means for ascending. Men of the present time point out a small ladder which reaches up to the highest point (of the rock) by which men of old ascended it, one foot at a time (?). They derive the name which they give to this building, viz. Po-loya, from an Indian word (pārāvata) signifying "pigeon." There are always Arhtas abiding here. This land is hilly and barren, without inhabitants. At a considerable distance from the hill there are villages, but all of them are inhabited by heretics. They know nothing of the law of Buddha or Śramanas, of Brāhmaṇs, or of any of the different schools of learning. The men of that country continually see persons come flying to the temple. On a certain occasion there were some Buddhist pilgrims from different countries who came here with a desire to pay religious worship at this temple. Then the men of the villages above alluded to ask them saying

'" Why do you not fly to it ? We behold the religious men who occupy those chamber constantly on the wing." " Because our wings are not yet perfectly formed." The country of Ta-thsin is precipitous, and the road dangerous and difficult to find. Those who wish to go there ought to give a present to the king of the country, either money or goods. The king then deputes certain men to accompany them as guides, and so they pass the travellers from one place to another, each party pointing out their own roads and intricate bye-paths. Fah Hian finding himself in the end unable to proceed to that country, reports in the above passages merely what he heard.'—(Beal's *Travels of Fah Hian and Sung-Yan*, pp. 139, 141.)

(20) ' The territory (Drāviḍa) which also includes the northern half of Ceylon, extends northwards up to an irregular line drawn from a point on the Arabian sea about 1,000 miles below Goa along the Western Ghats as far as Kolhapur, thence north-east through Hyderabad, and farther eastwards to the Bay of Bengal.'—(*Encyclopaedia*, Brit. ed. 11, p. 550.)

(21) Vesara is otherwise called Andhra or Telugu. ' The old Telugu country covers about 8,000 square miles, and is bounded on the east by the Bay of Bengal, on the north by the river Godāvarī, on the south by the Kṛishṇā.' (Dr. Barnett, *Catalogue of the Telugu Books*, Preface.)

The boundaries of the Telugu or Vesara country are given in detail in the *Linguistic Survey of India :* ' The Telugu country is bounded towards the east of the Bay of Bengal from about Barwa in the Ganjam District in the north to Madras in the south. From Barwa the frontier line goes westwards through Ganjam to the Eastern Ghats, and then southwards, crosses the Sobari on the border of the Sunkum and the Bijai Talukas in the Baster state, and thence runs along the range of the Bela Dila to the Indravatī. It follows that river to its confluence with the Godāvarī, and then runs through Chanda, cutting off the southern part of the district, and further eastwards, including the southern border of the district Wun. It then turns southwards to the Godāvarī at its confluence with the Mañjīra, and thence further south, towards Bidar where Telugu meets with Kanarese.'—(*Linguistic Survey of India*, Vol. iv, p. 577.)

See also the following :

Trikāṇḍaśesha (Bibl., 258, Cal., 2, 8, 44).
Hemachandra-abhidhāna-chintāmaṇi (12, 53).
Halāyudha (2, 295).
Naishadha-kārikā (Bibl., Cal., 10, 8).
Bṛihadāraṇyaka-upanishad (8, 15).
Śiśupālabadha (Bibl. 141, Cal. 12, 19).

(22) Nāgara seems to be a very popular geographical name (*see J. A. S. B.*, 1896, Vol. LXV, Part I, pp. 116-117) :

It is clear from the references that Nāgara was formerly the capital of Birbhum in Bengal; that Nāgara is the name of a famous port in Tanjore; that it is the name of an extensive division in Mysore; that a town named Nāgara and an ancient place called Nāgarakota are situated on the Bias in the district of Kangra, in the Punjab; that we find Nāgaravasti in Darbhanga, the town Nāgaraparken in Sindh and Nāgarakhas in the district of Basti; that there is a number of ancient villages in the Deccan called Nāgaram; and that Nāgara is the name of two rivers in North Bengal, the name of a village in the district of Dacca; and that of some nine or ten places, called Nāgara in Rajputana proper, three being towns, that a fortified village in the Santal Parganah is called Nāgara. The ancient Madhyamikā, which was once besieged by Menander, is now called Nāgari near Chitor (*Smith's History*, p. 187). Hieun Tsiang also mentions Nāgara (modern Jellalabad) which was a province of ancient Kapiśa (Kādphisa), the people whereof were the followers of Buddha (*see* his *Travels*, Index).

The Nāgaras are mentioned in the list of countries and peoples' given in the *Yogāvaśiṣṭha-Rāmāyaṇa* (*Utpatti-prakaraṇa*, XXXV, 33) as a people. The same list refers to the Drāviḍas (*ibid.*, 40) also as a people living south of the mount Chitra-kūta, below the river Godāvarī. In this list the Andhras, Kaliṅgas, and Chaulikas are clearly distinguished from the Drāviḍas (*ibid.*, 26–27).

Nāgara is the name of a script also mostly prevailing in Northern India. There lives a powerful tribe called Nāgara, in the mountaneous tract of Kabul in Afghanistan. Nāgara is the designation of a sect of Brāhmins also who, it is held, came over from some part of Northern India and settled down in Gujrat at a place known as Nagarānandapura. From these Nāgara Brāhmans, it is said, came the use of the Nāgarī alphabet. A portion (part VI) of the *Skanda-Purāṇa* bears the name Nāgara-khaṇḍa. From this instance, it would appear that the expression Nagara is at least as old as the Nāgara-khaṇḍa incorporated into the *Skanda-Purāṇa* which was according to a general concensus, composed in honour of, or, at least, named after Skandagupta (A.D. 455-480), the seventh Emperor of the early Gupta dynasty.

Why the Nāgara-khaṇḍa, the 6th part of the *Skanda-Purāṇa*, is so called is not explained explicitly in the *Purāṇa* itself. But from the contents of Chapters CXIV, CLXIII, CXCIX, CC, CCI and CCIII of this (6th) part, it seems to have been named after the Nāgara Brāhmins.

The etymological origin of the term *nagara* is, however, explained in Chapter CXIV of the Nāgara-khaṇḍa. It is stated (vv. 76, 77, 78, 93) to have arisen from an incantation of snake-posioning (*cf.* verses 1–113, *nagara*, no poison). Compare the following :

Garaṁ visham iti proktaṁ na tatrāsti cha sāmpratam ॥
Na garaṁ na garaṁ chaitach chhrutvā ye pannagādhamāḥ ।
Tatra sthāsyanti te vadhyā bhavishyanti yathā-sukham ॥
Adya prabhṛiti tat sthānaṁ (Chamatkāra-puraṁ) nagarākhyaṁ dharā-tale ।
Bhavishyati su-vikhyātaṁ tava kīrtti-vivarddhanam ॥
Evaṁ tan nagaram jātam asmāt kālād anantaram ॥

(*Skanda-Purāṇa*, Part VI, Nāgara-khaṇḍa, Chap. CXIV, vv., 76, 77, 78, 93.)

From all the literary and epigraphical instances given above, it appears certain that the expressions Nāgara, Vesara, and Drāviḍa are primarily geopraphical. But the precise boundaries of Nāgara, like those of Drāviḍa and Vesara, are not traceable. The epigraphical quotations, however, would tend to localize Nāgara somewhere within the territory of modern Mysore. But the Nāgara script, the Nāgara-khaṇḍa of the *Skanda-Purāṇa*, and the Nāgara-Brāhmins, representing some way or other the Northern India from the Himalaya to the Vindhya and from Gujrat to Magadha, would jointly give a wider boundary to Nāgara. Besides the author of the *Mānasāra* shows his acquaintance with buildings of the whole of India in the passage where he divides the best types of buildings by the following designations, namely, Pādchāla, Drāviḍa, Madhya-kānta (meaning apparently Madhyadeśa), Kaliṅga, Varāṭa (Virāṭa), Kerala, Vaṁśaka, Magadha, Janaka, and Sphūrjaka—(*M.*, XXX, 5–7.)

If the country of Nāgara, like those of Drāviḍa and Vesara be included in Southern India, in other words, if Northern India be excluded from the scope of the styles of buildings mentioned in records quoted above, the passage, mentioning the ten different types of buildings of the ten countries covering the whole of India, will have to be treated as what is called a spurious record, a term under which the conflicting ideas are reconciled by many a scholar. Let whatever be the boundaries of Nāgara, it is clear beyond doubt that the three styles of architecture have arisen from three geographical names, Nāgara, Vesara, and Drāviḍa. And there we have a parallel instance of similar divisions in the early Grecian architecture :

> The three ancient orders—the Doric, Ionic, Corinthian—on which were based the three styles of Grecian architecture have been traced by Vitruvius, an authority on architecture of the first century.

'In this country (Smyrna) allotting different spots for different purposes, they began to erect temples, the first of which was dedicated to Apollo Panionios, and resembled that which they had seen in Achaia, and they gave it the name of Doric, because they had first seen that species in the cities of Deoria.'—(Book IV, Chap. I.)

Gwilt comments on it thus: 'The origin of the Doric order is a question not easily disposed of. Many provinces of Greece bore the name of Doria; but the name is often the least satisfactory mode of accounting for the birth of the thing which bears it.'—(*Encycl.*, Art. 142.)

'The Ionic order, at first chiefly confined to the states of Asia Minor, appears to have been coeval with the Doric order.'—(Gwilt., *Encycl.*. Art. 153). 'That species, of which the Ionians (inhabitants, of Ion) were the inventors, has received the appellation of Ionic.'—(*Vitruvius*, Book IV, Chap. I.)

The third species, Corinthian, is so called because 'Callimachus, who for his great ingenuity and taste was called by the Athenians Catatechnos, happening at this time to pass by the tomb, observed the basket and the delicacy of the foliage which surrounded it. Pleased with the form and novelty of combination, he constructed, from the hint thus afforded, columns of this species in the country about Corinth.'—(*Ibid.*, Chap. I.)

'When Solomon ascended the throne, anxious to fulfil the wish of his father had long entertained of erecting a fixed temple for the reception of the ark, he was not only obliged to send to Tyre for workmen, but for an architect also. Upon this temple a dissertation has been written by a Spaniard of the name of Villalpanda, wherein he, with consummate simplicity, urges that the *orders, instead of being invention of the Greeks, were the invention of God Himself*, and that Callimachus most shamefully put for the pretentions to the formation of the Corinthian capital which, he says, had been used centuries before in the temple at Jerusalem.'—(*Ibid.*, Art. 52.)

'The other two orders, Tuscan and Composite, which are of a later date than the time of Vitruvius, are of Italian or Roman origin. The Composite, as its title denotes, is the combination of other orders and has thus no independent importance. The Tuscan order has also reference to the country of Tuscany, formerly called Eutruria, a country of Italy.'—(Gwilt, *Encycl.*, Art. 178.)

The origin of the Indian architecture is attributed to a mythological person Viśvakarman, literally the Creator of the Universe. But the styles of architecture are stated to have been invented by one Bammoja.

'An interesting record from Holal is the label cut on the capital of a finely carved pillar in the Amṛteśvara temple. It is called in the inscription a Sūkāra-pillar. Speaking of the sculptor who made it, the record says that he, Bammoja, the pupil of Padoja of Soge, was a Viśvakarma, i.e. the architect of the gods in this Kali age, the master of the sixty-four arts and sciences, the clever builder of the sixty-four varieties of mansions and the architect who had invented (discovered) the four types of buildings, viz. Nāgara, Kaliṅga, Drāviḍa and Vesara. An earlier sculptor of about A. D. ninth century of whom we hear from an inscription on a pedestal at Kogali, was a grandson of Śivananni. It is stated that he made the image of the sun (divasa-kara) of which the stone in question was evidently the pedestal.'—(Government of Madras G. O. no. 1260, 15th August, 1915, p. 90, *see also* Progress Report of the Assistant Archaeological Superintendent for Epigraphy, Southern Circle, 1914–15, p. 90.)

It has been pointed out already that Kāliṅga is mentioned in the *Mānasāra* (xxx. 5–7) as the name of a *type* of building, but therein it is never stated as a *style* like the Nāgara, Vesara and Drāviḍa, the Kāliṅga type of buildings being apparently included in one of these three styles. In the same treatise there is another passage, pointed out above, where Randhra or Andhra is mentioned as a type of chariots. It has also been stated above that these Kāliṅga and Andhra might be two branches of the Vesara, being geographically placed on the two sides of it, the three together forming Tri-Kaliṅga or three Kaliṅgas. In one of the epigraphical quotations (no. 15) Bhūmija is mentioned alongside Drāviḍa and Nāgara, and this Bhūmija (*lit.* originated in the land or the style of the land, where the document was written) is apparently same as Vesara.

Some of the numerous literary and epigraphical quotations given above must be placed in dates later than the time of Bammoja, mentioned in the present document. But neither his name nor his style (Kāliṅga) is associated with the three styles, Nāgara, Vesara, Drāvida, in any of the instances quoted above. It is not unlikely that Bammoja 'discovered' the three styles, which had been perhaps existing long before him, and adding his own invention (Kaliṅga) claimed the originality for all the four. Such instances of unscrupulously adding to the works of one's predecessors and claiming the originality are not rare in the literary or the archaeological records.

It does not seem probable that any one person could have invented all the styles of architecture at one time and issued them as a royal command; they are more likely to have arisen out of the local

circumstances at different periods, before they were recorded, presumably first in the architectural treatises and then in the epigraphical records.

The object of this article is not, however, to identify the country of Nāgara, nor to find out the inventor or inventors of the styles, although on them depend many interesting points of the ancient Indian architecture. Here it is clear that the expressions Nāgara, Vesara and Drāviḍa are geographical, and that they imply three styles of architecture in its broadest sense.

But on the last point, too, modern authorities hold different views. In discussing the styles of Indian architecture, Mr. Havell is of opinion (*Study of the Indian Civilization*, Preface) that they are Śiva and Vishṇu, and not Northern and Southern, or the Indo-Aryan and the Draviḍian, as Fergusson and Burgess suppose to be (*cf. History of Ind. and East. Arch.*, 1910). The *Śilpā-śāstra* and the *Āgamas* seem to disagree to Havell's theory nor do they wholly support the views of Fergusson and Burgess. The division proposed by Havell, being not geographical, may be systematically applied to religious architecture, while that adopted by Fergusson and Burgess being of a geographical nature, is more in agreement with the system of the *Śilpa-śāstras* than Havell's division.

The fact that the Hindu art-consciousness is largely dominated by a spiritual motive being strictly adhered to, it would follow that Havell's division into Śiva and Vishṇu, or others, into Hindu, Buddhist and Jain, would be more logical than that into Northern, Eastern and Southern, or Nāgara, Vesara and Drāviḍa. But even admitting this, we must not forget that the Hindus knew the point where exactly to draw the line between religion, on the one hand, and social and political life, on the other. It is needless to observe that within the three geographical styles the sectarian subdivisions are quite feasible.

NĀṬAKA—A moulding, a theatre, a calyx, a crowning, moulding or ornament of a pillar; it is generally used together with petals; the part of the capital which supports the abacus (phalakā) is sometimes so called; a cardinal number.

Pādānām api sarveshāṁ patra-jātyair alaṅkṛitam ।
Antare nāṭakair yuktaṁ padmānāṁ tu dalair yutam ।

(*M.*, XIV, 149–150.)

In connexion with the entablature: Nāṭakānta-mṛiṇālikā ।

(*M.*, XVI, 53.)

Narair vā nāṭakāṅge tu kuryād devālayādīnām ।
Harmyāntarālayāḥ sarve nṛiṇāṁ nāṭaka-saṁyutam ।
Etat tu prastarasyordhve nāṭakasyordhvāṁśavat ।
(*M.*, XVI, 112, 114, 117.)

Athavā tapasvinīnāṁ cha kaṭhe vā nāṭakāhakam (maṇḍapam) ।
(*M.*, XXXIV, 426.)

In connexion with pavilions (maṇḍapa) :
Nāṭka-vistaraṁ pañcha-pañcha-bhāgena yojayet ।
(*Ibid.*, 503.)

In connexion with the arch (toraṇa) :
Makara-kiṁbarī-vaktraṁ nāṭakādi-bhujaṅgavat ।
Kesari-maṇḍanaṁ bhavati chitra-toraṇa-nāṭakaiḥ ।
(*M.*, XLVI, 66–67.)

The cardinal number ten :
Shat-saptāshṭaka-daṇḍaṁ vā nanda-nāṭaka-rudrakam ।
(*M.*, IX, 430.)

Its synonym are anta, mṛināḷikā vallika, patra, vallī, chitrāṅga and kulikāṅghrika.—(*M.* XVI, 53–55.)

NĀṬIKĀ—A moulding.

In connexion with the arch (toraṇa) :
Nāṭikā phalakā mushṭi-bandhanaṁ patra-vallikam ।
(*M.*, XLVI, 65.)

In connexion with the pillar :
Kumbhāyāmaṁ tathotkaṇṭam ūrdhve karṇa-samaṁ bhavet ।
Tat-samaṁ nāṭikākhyaṁ syād unnataṁ tad viśeshtaḥ ।
(*M.*, XV, 54–55.)

NĀṬYA-GṚIHA(-MAṆḌAPA, -VEŚMA, -ŚĀLĀ)—The play-house, theatre, music hall, dancing pavilion, used for enacting a drama (abhinaya), holding a music performance (saṅgīta) or dancing show (nṛitta). It is built in connexion with a temple, a palace, and independently for the use of general public in towns, countryside and mountain valley. It is built in various shapes—circular (vṛitta) semi-circular (vikṛishṭa), quadrangular (chaturaśra), and triangular (tryaśra). Abhinava-gupta, the commentator of *Bharata-Nāṭya-śāstra* refers to some eighteen varieties with reference to shape and size.

It consists of two main parts : the auditorium (prekshā-gṛiha) and the stage (raṅga-maṇḍapa). The former faces the latter and is one storey (bhūmi) lower in situation. The auditorium supplies the seating arrangement which varies in accordance with the shape of the theatre and in consideration of its being attached to a temple, or palace, or built independently for the use of the general public. In an open variety of the theatre built in the

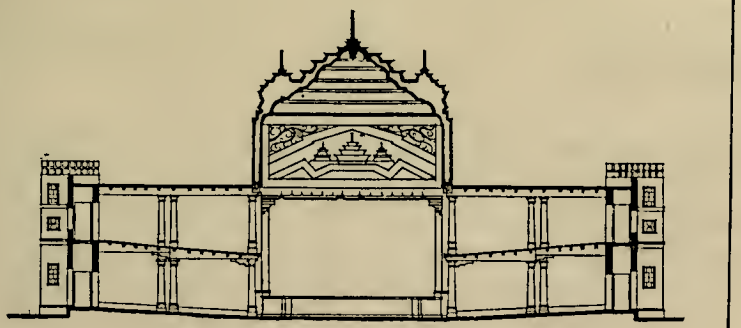
courtyard of a temple 'all kinds of seats are assigned for ordinary, special, and occasional uses to Chakravartin and other classes of kings, as well for the gods, to be seated together with their consorts, as also for the accommodation of ordinary people.' (*Mānasāra*, XLVII, 26–29). In a closed variety of the palace theatre the seating arrangement is more specifically shown. The first row corresponding to stall and facing the stage is occupied in the centre by the court ladies (varāṅganā) having the learned courtiers on their right and the bards on their left. Immediately behind the court ladies is the royal seat, on the left of which seats are reserved for the harem (antaḥpura) and on the right is the seat for the chief queen and others. The stage proper consists of raṅga-śīrsha (stage-front), raṅga-pīṭha (the place immediately behind for acting), and nepathya-gṛiha (green-room). It is shaped like a mountain cave and have two floors. The upper floor or the platform (vedikā) is made of wood, and the surrounding walls, of bricks.

Like many other things the Indian tradition has ascribed a divine, that is, an indigenous origin to Sanskrit drama rather than a Grecian influence. The *Nāṭyaveda* is stated to have been created by Brahmā for the benefit of all castes including the Śūdras who had no access to the *Vedas*. It is significant that dramas were intended at origin to provide facilities for the enjoyment of all classes of people, thus indicating popularity and interest to the subject of the general public, men, women and children, who could hardly be expected even if they were all literate, to read the texts in Sanskrit in order to enjoy the dramas. Thus the drama is stated to have been compiled of the element of recitation from the *Ṛig-Veda*, the element of chanting or songs from the *Sāma-Veda*, the element of mimic art from the *Yajur-Veda*, and the element of sentiment from the *Athar-Veda*. Śiva and Pārvatī are stated to have contributed the Tāṇḍava and Lāsya dances, and Vishṇu 'the four dramatic styles essential to the effect of any play.' Viśvakarman, the divine architect, is stated to have built the first playhouse in which the sage Bharata carried into practice the dramatic art thus created.[1]

This traditional account has been gathered from the *Bharata-Nāṭya-śāstra* which treatise the Western scholars have placed in the third century of the Christian era. There is also a class of works, called *Naṭasūtra*, referred to in Paṇini's grammar (4, 3, 110), dealing with directions to actors (naṭa). But the dialogues and other elements have been discovered in the early *Vedas*.[2] These dialogues are romantic in nature and dramatic in essence. Thus the conversations between Yama and Yamī, or Purūravas and Ūrvaśi would charm a modern audience in a most up-to-date theatre. Professor Keith has further recognized that 'the Vedic ritual contained within

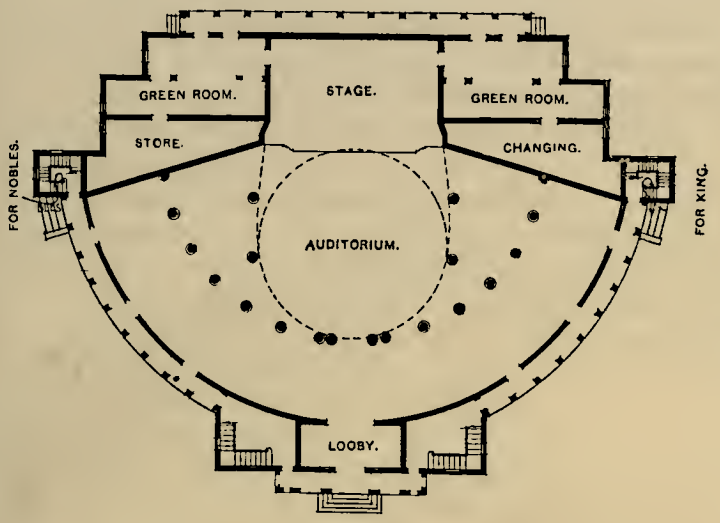
[1] Keith: *Sanskrit Drama*, p. 12.

[2] For instance *Ṛig-Veda*, v. 10, 51–53, 86, 95, 108; VIII, 100; I, 179, 28; IV, 18.



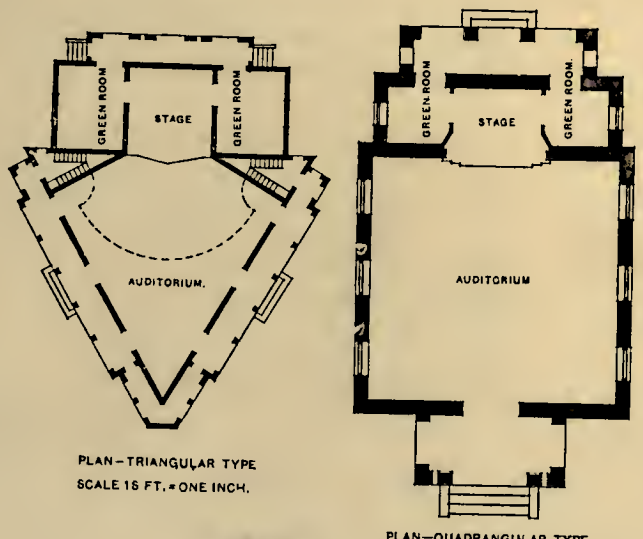
A SUGGESTION FOR THE INTERIOR.

SCALE OF 10 5 10 15 20 25 30 35 40 45 50 FEET.



PLAN–SEMI CIRCULAR TYPE.

NĀṬYA GṚIHA



itself the germs of drama' and in the ceremonies 'there was undoubtedly present the element of dramatic representation.' [1]

In the *Rāmāyaṇa* mention is made of the dramatic artists (naṭa), professional dancer (nartaka), and plays in mixed languages (Vyāmiśraka). In the *Harivaṁśa* which is a continuation of the *Mahābhārata* mention is made of players who made a drama out of the *Rāmāyaṇa* legend. The evidence of dramas being actually played in a theatre is found in the *Mahābhāshya* 'which mentions representations of *Kaṁsa-vadha* (slaying of Kaṁsa) and the Bālibandha (binding of Bāli).[2]

The Prekshāgāra or auditorium is mentioned in the *Mālavikāgnimitra* (Act I). Saṅgīta-śālā or music hall is referred to in the *Śākuntala* (Act V).

The *Bhāvaprakāsana* (x, 5–18) refers to three types of theatres and thirty different kinds of dramas which were actually played by a dramatic company under the direction of Divākara :

Chaturaśra-tryaśra-vṛitta-bhedāt so'pi tridhā bhavet ।

The *Saṅgīta-chūḍāmaṇī*, a text in manuscript, describes the drop scene and other curtain : 'the first curtain is the front drop which is removed as soon as the show begins. Behind the mist-like curtain, the *danseuse* performs the dance called *lāsya* (nude)' (*Triveṇi*, p. 722). Sceneries are described in great detail in the *Bharata-Nāṭya-śāstra* :

Kakshā-vibhāge jñeyāni gṛihāṇi nagarāṇi cha ।
Udyānārāma sarid-āśramā aṭavī tathā ॥
Pṛithivī sāgarāś chaiva trailokyaṁ sacharācharam ।
Varshāṇi sapta-dvipāś cha parvatā vividhās tathā ॥
Alokaś chaiva lokaś cha rasātalamathāpi cha ।
Daityānāṁ ālayaś chaiva gṛihāṁ bhuvanāṁ cha ॥
Nagare cha vane chāpi varshe vai parvate tathā ।
Yatra vārthā pravarteta tatra kakshāṁ prayojayet ॥
Bāhyaṁ vā madhyamaṁ vāpi tathaivābhyantaraṁ punaḥ ।
Dūraṁ vā sannikishṭaṁ vā deśaṁ tu parikalpayet ।

(*Nāṭya-śāstra*, ed. Joan Grosset, Paris, 1898.)

The same text describes with minute particulars and dimensions the auditorium of three types :

Idaṁ prekshāgṛihaṁ dṛishṭvā dhīmatā Viśvakarmaṇā ।
Tri-vidhaḥ sanniveśāścha śāstrataḥ parikalpitaḥ ।
Viprakṛishṭaś-chaturaśras cha tryaśras chaiva tu maṇḍapaḥ ।
Prekshāgṛihāṇāṁ sarveshāṁ tri-prakāro vidhiḥ smṛitaḥ ॥

(*Nāṭya-śāstra*, Gaekwad's Series, xxxvi, Chap. ii, 7, 8, 25.)

[1] Keith : *Sanskrit Drama*, p. 23.

[2] Mahābhāshya on Paṇini 3, 1, 26 ; *see* Macdonell, *History of Sanskrit Literature*, p. 347.

The pillars, doors, walls, green-rooms, etc. are fully described :

Stambhaṁ dvāraṁ cha bhittiṁ cha nepathyagṛiham eva cha ।
Evam utthāpayet tajjño vidhi-dṛishṭena karmaṇā ॥

(*Nāṭya-śās'tra*, Gaekwad's Series, xxxvi, Chap. ii, 65–66.)

The stage proper with its different members are also described :

Raṅga-piṭhaṁ tataḥ kāryaṁ vidhi-dṛishṭena karmaṇā ।

(*Ibid.*, ii, 71.)

Raṅga-śīrshaṁ tu kartavyaṁ shad-dāru-samanvitam ।
Kāryaṁ dvāra-dvayaṁ chātra nepathyasya gṛihasya cha ।

(*Ibid.*, ii, 71, 72 ; *see also* 78.)

Evaṁ kāshṭha-vidhiṁ kritvā bhitti-karṇena prayojāyet ।
Nirvyūha-kuharopetaṁ nānā-gratitha-vedikam ।
Kāryaḥ śaila-guhākāro dvi-bhūmir nāṭya-maṇḍapaḥ ।

(*Ibid.*, ii, 70, 84.)

Compare DARĪGṚIHA (*Kumāra-saṁbhava*, I, 10, 14) and ŚILĀ-VEŚMAṄ (*Megha-dūta*, i, 25).

The *Śilpa-ratna* of Śrikumāra also describes two or three types of playhouses (Chap. xxxix, 60–68).

The playhouses belonging to temples, palaces and ordinary dwelling houses are described in the *Mānasāra* (xlvii, 2–12, 16, 20, 24–29, *see* quotations under MADHYARAṄGA).

The epigraphical evidences are also not wanting. Thus from its arrangements and inscriptions the cave in Ramgarh hill in Sarguja 'appears to have been evidently intended for dramatic performances.' [1] The queen's cave and that of Gaṇeśa in Udayagiri 'are further examples: they represent the doings of these ladies and gentlemen (actresses and actors) in a highly realistic way.' [2] 'By Nāga, the Vīra-Ballāla-paṭṭam-svāmi, were built the dancing hall and terrace of Pārśva-deva, and in front of the Basadi of Kamaṭha Pārśva Deva stone pillars and a dancing hall were made.' [3]

All these documents, comprising general literature, technical works on music, architectural texts, and epigraphical records, may supply a fairly complete picture of the playhouse of the Hindu period. It needs no elucidation that the Hindu mind is essentially musical. Music was required for the Hindus to celebrate one's birth, wedding and similar other happy occasions.

[1] Dr. Block : *Zeitschrift der Deutschen Morgenlandischen, Bd.*, lviii, S. 455.

[2] Lüders : Indian Caves as Pleasure Resorts, *Indian Antiquary*, xxxiv, pp. 199–200. But Jacobi is still under the old prejudice when referring to the cave theatre of Ramgarh hill he says that 'it is arranged after the Greek pattern.' The cave threatres are, however, referred to in the *Kumāra-saṁbhava* (i, 10, 14) and *Megha-dūta* (i, 25) of Kālidāsa.

[3] Rice : *Ep. Carnat.*, Vol. ii, no. 130 ; Translation, p. 178. *See also* the Hampe Inscription of Krishnaraya, lines 24, 32, North Face.

It was also required to mourn one's death and similar sad incidents including even calamities as like earthquakes and epidemics. Religious ceremonies had to be accompanied by music. These musics include both vocal and instrumental songs, dancing, and enacting of plays varying from a single act or scene to a performance which continued for days and nights. Thus the elements of drama are available in the earliest *Vedas*. The excavations at Mahenjo-Daro, Harappa and other sites may supply evidence of regular theatre even for the Pre-Vedic period. In order to carry out into practice the musical habit of the Hindus, which was so convincingly in existence for milleniums, no doubt suitable accommodation had to be found out by indigenous efforts and evolution. It would be the limit of prejudice to imagine that although the Hindus knew all about a dramatic performance and although the art of building was understood and successfully practised at least between 3000 and 4000 B. C. when Mahenjo-Daro edifices might have been erected, yet they did not think of constructing a playhouse even after the model of the then existing natural caves until the Grecian invaders supplied the pattern between 300 and 350 B. C. Those who are not thus prejudiced will find it easy to infer from the evidences quoted above and to come to the conclusion that there were in Hindu India rustic theatres for folk dance or popular performance, as well as regularly constructed playhouses of various shapes and sizes. They were built with scientific knowledge of acoustics, light, ventilation, safety and security. They were erected in villages, small country towns, centres of pilgrimages, and in big capital cities. They were attached to commodious dwelling houses, king's palaces, and god's temples. In all these constructions provisions were distinctly made for the stage proper and the auditorium. The former comprised the platform with a thick drop scene in front and the theatre proper with various realistic sceneries and curtains behind which even semi-nude dance could be performed, the indecency being prevented by the mistiness caused by the device of thin curtains and light. The green-rooms and other rooms were made for dressing and resting of the actors and actresses, and even for an interview with them by some fascinated audience. The auditorium with the orchestra in front provided seats for all classes and ranks of audience, which were artistically arranged in tiers and galleries. It was adorned with beautiful doors, windows, balconies, and walls and ceilings with carvings and paintings on them. There were also open air auditorium with surrounding walls and terraces which latter served as galleries. But the stage appears never to have been uncovered either on the sides or at the top.[1]

[1] For further details, *see* the writer's article, 'The Playhouse of the Hindu Period' (*Modern Review*, April, 1935, pp. 370–378, Krishnaswami Aiyangar's Commemoration Volume, pp. 363–380).

NĀṬYA-MAṆḌAPA—The stage proper consisting of raṅga-śirsha (stage-front), raṅga-pīṭha (place for acting), and nepathya-gṛiha (green-room). In shape it should be like a mountain cave and have two floors :

Kāryaḥ Śailaguhākāro dvi-bhūmir nāṭya-maṇḍapa ।

(*Bharata-Naṭya-śāstra* II, 84, also 91.)

The upper floor or the platform (Vedika, *ibid.*, II 80) should be made of wood :

Evaṁ kāshṭha-vidhiṁ kṛitvā bhitti-karma prajojayet ।—(*Ibid.*, II, 82.)

The surrounding walls should be made of bricks (ślishṭeshṭaka).

NĀṬṬA (NĀṬYA)-ŚĀLĀ—A detached building used as a music hall.

Nāṭṭa-śālā cha karttavyā dvāra-deśa-samāśrayā ।

And the music hall should be built attached to the gateway (of the temple).

(*Garuḍa-Purāṇa*, Chap. XLVII, v. 45.)

A maṇḍapa or hall for religious music, built in front of the main temple :

Durgga-devālayasyābharaṇam iva puraḥ sthāpayāmāsa gurvvīṁ śrīmān śrīnātha-vīryyaḥ sthagita-daśa-diśān nāṭya-śālāṁ chhalena ।

(Dirghasi Inscrip. of Vanapati, lines 14–15, *Ep. Ind.*, Vol. IV, p. 316.)

NĀBHI-VĪTHI—A road proceeding from the central part of a village or town.

Brahma-bhāga-vṛiddhyā vīthir nābhi-vīthīti kathyate ।

(*Kāmikāgama*, XXV, 1.)

NĀRAṆA—A temple of Vishṇu.

(Note on a Tamil Inscription in Siam, Hultsch, *J. R A. S.*, 1913, pp. 337–339.)

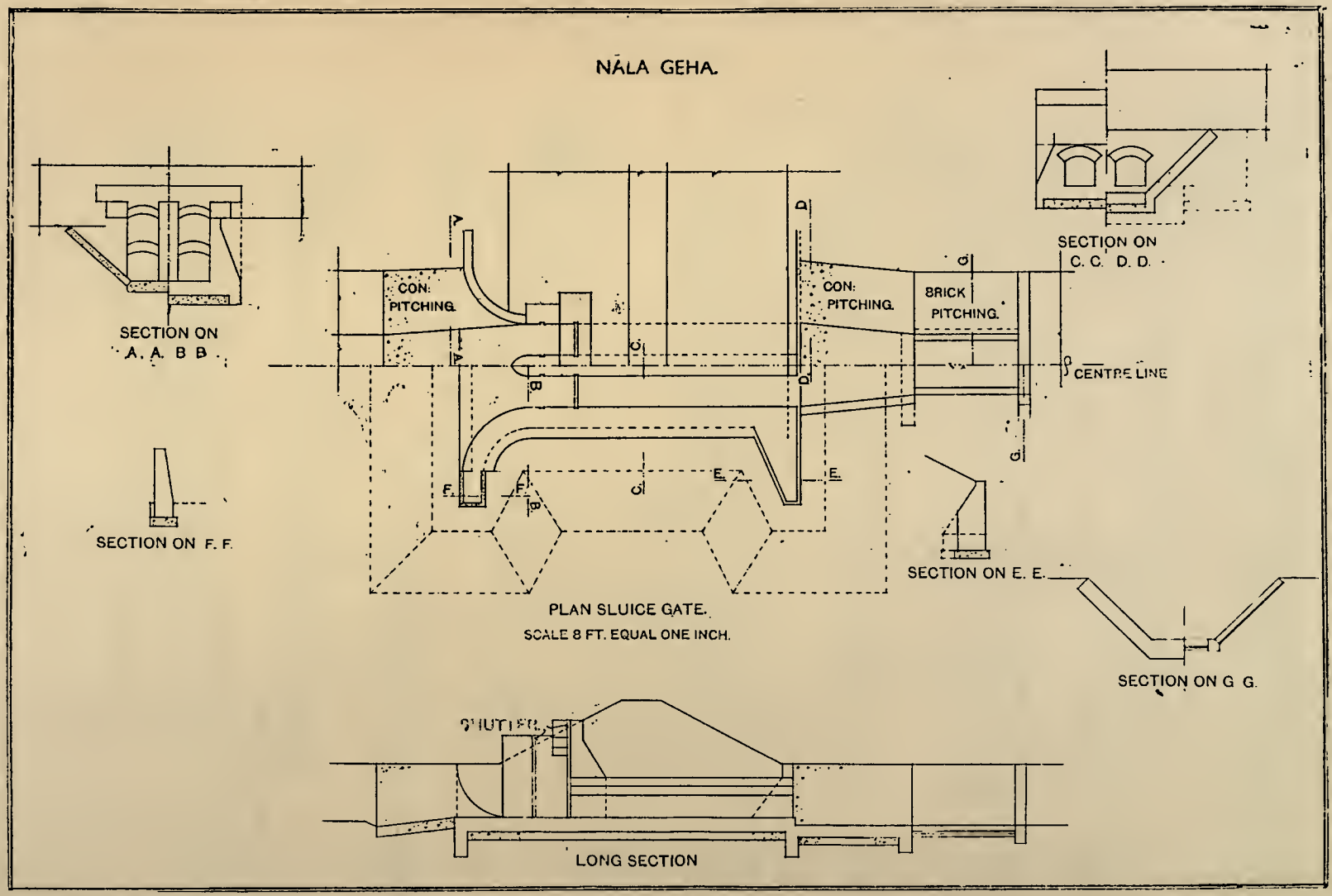
NĀRĀCHA—A road running towards the east.

Prāṅ-mukhā vīthayaḥ sarvā nārāchākhye(ā i)ti smṛitāḥ ।

(*Kāmikāgama*, XXV, 3.)

NĀLA—A canal or gutter, channel, lotus stalk (*M.*, XIX, 144, 148, 153, etc.), a tubular vessel of the body (*M.*, L, 198, 201, 205, etc.), middle, central (*M.*, XXXIII, 360, XLIII, 14).

In connexion with the phallus.—(*M.*, LII, 294–296, etc.)


NALA GEHA.
SECTION ON A. A. B B.
SECTION ON C. C. D. D.
CON: PITCHING.
CON: PITCHING.
BRICK PITCHING.
CENTRE LINE
SECTION ON F. F.
SECTION ON E. E.
PLAN SLUICE GATE.
SCALE 8 FT. EQUAL ONE INCH.
SECTION ON G G.
SHUTTER.
LONG SECTION

NĀLA-GEHA—A canal-house, channel, *middle chamber*, central hall.

. . . Bhitti-gcham ihochyate ।
Tri-chatush-pañcha-shaḍ-bhāgaṁ saptāṁśaṁ kuḍya-vistāram ।
Śeshaṁ tu nāla-gehaṁ tu. . . . ।

(*M.*, XXXIII, 359, 360.)

NĀLANDA—The famous Buddhist institution at Bihar, comprising several *vihāra*, *sangarama*, *dharmaganja*, and *chaitya* buildings; there were colleges, halls, libraries, observatories, priests' chambers, 'richly adorned towers and the fairy-like turrets' and 'brilliant and magnificent memorial' buildings. 'The whole establishment is surrounded by a brick-wall. One gate opens into the great college, from which are separated eight other halls, standing in the middle. (Accounts of Hiuen Tsiang, I-tsing, Tibetan writers, Excavations, Archaeological Survey, and Sankalia); *see* under VIŚVAVIDYĀLAYA.

NĀLIKĀ (*see* NĀLA)—A canal, the lower leg.

Ekāṁśaṁ tad-dhataṁ bhitti-tāraṁ śeshaṁ cha nālikā ।

(*M.*, XXXIII, 438.)

The lower leg.—(*M.*, XLV, 42, etc.)

NĀLIKĀ-GARBHA—A rectangular hall of the length twice the breadth.

Nālikā gabbho ti bitt harato dviguṇita-guṇāyamo digha-gabbho ।

(Buddhaghosha, *Chullavagga*, VI, 33.)

The interpretation of Oldenberg and Rhys Davids as 'palanquin-shaped' given under the translation of the term is not supported by the commentator Buddhaghosha as quoted above.

NĀLIKĀ-GṚIHA (*see* NĀLA-GEHA)—A canal house.

(*M.*, XIX, 98, etc.)

NĀLI (*see* NĀLIKĀ)—A canal, a gutter.

Geha-tāre tu saptāṁśaṁ nālī-tāraṁ yugāṁśakam ।

(*M.*, XIX, 115; *see also* 116.)

NĀSĀ—A nose, a nose-shaped object, the upper piece of a door, a vestibule.

Vijñeyā nāsikā nāsā nāsā dvārordhva-dāru cha ।

(*Amarakōsha*, II, ii, 13.)

In connexion with the base:

Grāhādi-chitra-sarveshāṁ kshudra-nāsādi-bhūshitam ।

(*M.*, XIV, 236, etc.)

NĀSIKĀ(-SĪ) (*see* Nāsā)—A nose-shaped architectural object, a vestibule, an open court or porch before a house, a hall next to the entrance to a house, a bracket.

In connexion with the pillar (*M.*, XVI, 76, 77, 90, 120, etc).

Some component part of a building (*M.*, XVII, 207; XIX, 174, etc.).

Chatur-dikshu chatur-nāsī (*M.*, L, 284).

Suprabhedāgama, XXXI (referring to a class of buildings) :

Chatush-kūṭāś chatuḥ-śālāś chatvāraḥ pārśva-nāsikāḥ | (48)
Mukha-nāsī tathā yuktaṁ dvā-daśaṁ chānu-nāsikāḥ | (49)
Chatur-nāsī-samāyuktam anu-nāsī-daśāshṭakam || (51)
Kūṭa-śālā-samāyuktā punaḥ pañjara-nāsikā || (52)
Pārśvayor nāsikā-yuktaṁ tan-madhye tanu(tvanu)-nāsikā || (79)
Eka-nāsikayā yuktaṁ pañjaraṁ samudāhṛitam |
Kūṭeshu nāsikā-yuktaṁ koshṭham etat prakīrtitam || (80)

Kāmikāgama, LV (eight kinds of Nāsikā) :

Nāsikā tv-ashṭadhā jñeyā tasyādau siṁha-saṁjñitam |
Sārdha-pañjaram anyat syāt tṛitīyaṁ matam || (132)

Shaped like the nose (*M.*, XXXIII, 541).

Its height ends by the fore-part of the dome (*M.*, XXXIII, 549).

See also M., XXXIII, 550–561.

Shaped like śālā, śikhā, circular, galakūṭa (*M.*, XXXIII, 552–553).

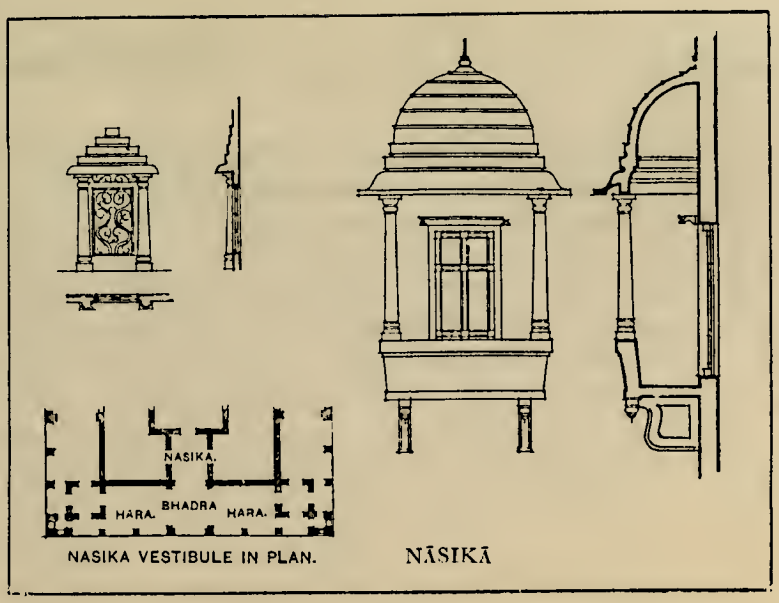
Niryūha-pañjaraṁ paśchāt pañchamaṁ lamba-nāsikam |
Siṁha-śrotraṁ tu shashṭaṁ syāt khaṇḍa-niryūhakaṁ tathā |
Jhasa-pañjaram anyat syāt tāsāṁ lakshaṇam uchyate || (133)

They are also called pañjaras :

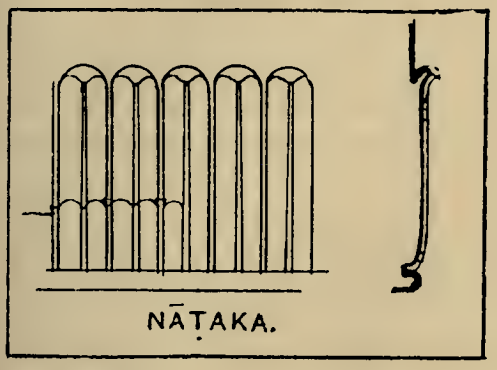
Sarveshāṁ pañjarāṇāṁ tu mānam evam udāhṛitam || (149)

The details of these nāsikās or pañjaras (*ibid.*, 134–146).

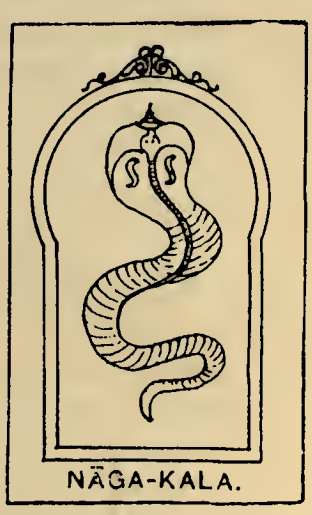
Śliṣhṭa-prāsāda-nīvrāṅga-vipulaṁ sama-nirgamam |
Shaṭ-varga-sahitaṁ śakti-dhvajayor mukha-paṭṭikam | (134)
Vedikā-jālakā-stambha-rājitaṁ siṁha-pañjaram |
Tri-daṇḍādi-chatur-daṇḍa-paryantaṁ vipulānvitam || (135)
Yathārhāyāma-saṁyuktaṁ sūchi-pāda-dvayaṁ dvijāḥ |
Sarveshāṁ pañjarāṇāṁ tu madhyame saṁprayojayet || (136)
Dhāmni prāsādam āśliṣhṭaṁ sanīvraṁ chārdha-nirgatam |
Adhiṣṭhānādi-pañchāṅga-śakti-dhvaja-samanvitam || (137)
Mukha-paṭṭikayopetaṁ vedikā-jālakānvitaṁ ||
Karṇa-pāda-yutaṁ sārdha-pañjaraṁ tu vidhīyate || (138)
Prāgvad vipula-saṁyuktaṁ pāda-nirgamānvitam |
Tri-bhāgaṁ nirgataṁ vāpi vṛita-sphaṭika-sannibham || (139)
Pañjarasyādimaṁ śesha(ṁ) prāgvad atra samīritam || (140)
Svānurūpa-śikhāsv-agraṁ śliṣhṭa-nīvrāṅga-karṇakam |



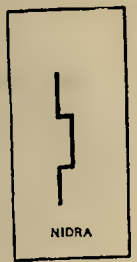
NASIKA VESTIBULE IN PLAN. NĀSIKĀ



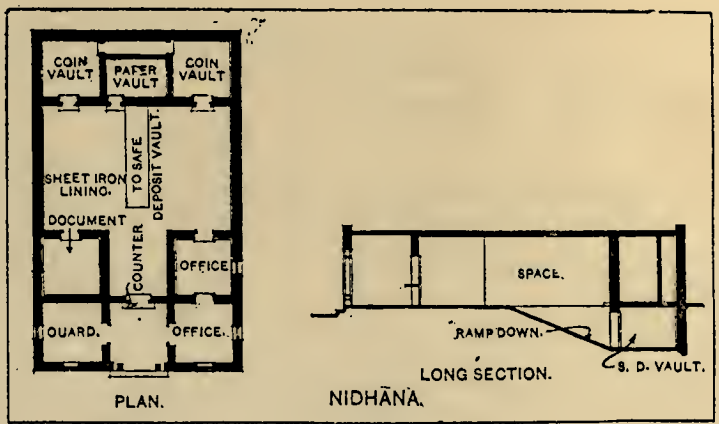
NĀṬAKA.



NĀGA-KALA.



NIDRA



PLAN. LONG SECTION.

NIDHĀNA.

Kapotādyaṅga-saṁyuktam etan niryūha-pañjaram ॥ (141)
Saṁślishṭa-nīvra-karṇāṅghri-kṛita-nāga-talaṁ śiraḥ ।
Niryūha-rahitaṁ yuktaṁ sarvāṅgaṁ lamba-nāsikam ॥ (142)
Tad eva siṁha-śrotrābha-śikhaṁ yad-vad nīvrakam ।
Saṁśritaṁ karṇa-pādena siṁha-śrotraṁ tad uchyate ॥ (143)
Vistāre pañchamāṁśe tu dvyaṁśaṁ nirgamanānvitam ।
Nīvrādhastāt kapotādyair aṁśair maṇḍita-rupakam ॥
Nāmnā tu khaṇḍa-niryūha(ṁ) jñātvā samyak prayojayet ॥ (144)
Daṇḍa-daṇḍānta-nishkrāntaṁ nīvrādhastād upary-adhaḥ ।
Aṅgair yuktaṁ kapotādyaiḥ kandharaṁ toraṇānvitam ॥ (145)
Jhasa-pañjaram etat syād ashṭamaṁ nāmataḥ dvijāḥ ॥ (146)

NĀHA-LIṄGA—A kind of phallus.

Āchārya-hastena vā liṅgaṁ śishya -(sya)s tu nāha-liṅga-vat ।

(*M.*, LII, 335 ; *see* details under LIṄGA.)

NIGAMA—A town, the quarters inhabited by traders, a market.

(*M.*, X, 42 ; *see* details under NAGARA.)

Cf. Nagara-nigama-jana-padānām—'towns, marts and rural parts (e. g. Grāma-nagara-nigama, *Harshacharita*, p. 220, 1, 1.)'—(Junagaḍh Inscrip. of Rudradaman, lines 10–11, *Ep. Ind.*, Vol. VIII, pp. 43, 37, and note 5.)

Nigama-sabhāya-nibadha—registered at the town's hall.—(Senart, Nasik Cave Inscrip. no. 12, line 4, *Ep. Ind.*, Vol. VIII, pp. 82, 83.)

NIGAMA-SABHĀ (*see* NIGAMA)—A guild-hall, the traders, assembly.

Cf. Eta cha sarva-srāvita-nigama-sabhāya nibaddha cha phalaka-vāre charitrā iti—'and all this has been proclaimed in the guild-hall and has been written on boards according to custom.'

'Nigama-sabhāya, 'in the guild-hall,' may also be translated 'in the assembly of the traders.' Dr. Burgess.—(Kshatrapa Inscrip. no. 9, line 4, *Arch. Surv.*, New Imp. Series, Vol. IV, pp. 102, 103, note 3 on page 103.)

NIDRĀ—A moulding.

Vājanaṁ chaika-bhāgena nidrekā vājanaṁ tribhiḥ ॥
Vājanaṁ chaika-bhāgena tathā nidrā tri-bhāgataḥ ॥

(*Kāmikāgama*, LV, 10, 11.)-

NIDHĀNA—A store-room, a treasury.

Vimāna-śāleshu cha maṇḍapeshu nidhāna-sadmeshv-api gopuresh-vapi ।

(*M.*, XIV, 397–400.)

NIB(-V)IḌA—An ornament covering the lower part of the pent-roof, a moulding.

Agraṁ vikaśitābhaṁ syān mūlaṁ cha nibiḍānvitam ।
(*M.*, XVIII, 245, etc.)

NIMNA(-KA)—The cavity, depth, depressed part, drip, projection, edge of an architectural or sculptural object, a moulding.

A moulding of the base (*M.*, XIV, 247, etc.; *see* the lists of mouldings under ADHISHṬHĀNA).

A moulding of the column (*M.*, XV, 52).

A moulding of the pīṭha or pedestal of the phallus (*M.*, LIII, 27).

Chatur-dikshu sabhadraṁ vā chaika-dvy-aṁśena nimnakam ।
(*M.*, L, 285.)

The depressed part of the chin :

Hanvantaṁ tad-dvayor madhye nimna-tuṅgaṁ śivāyatam ।
(*M.*, XLV, 103.)

NIRGAMA—The projection.

(1) *Mānasāra* :

The projections of the mouldings of the base (*M.*, XIV, 385–412 ; *see* under ADHISHṬHĀNA).

The projections of the mouldings of the pedestal (*M.*, XIII, 128–146 ; *see* under UPAPĪṬHA.)

The projection of the (whole) pedestal (*ibid.*. 20–35).

Cf. Nirgamodgamane vāpi putra-nāśam avāpnuyāt ।—(*M.*, LXIX, 19.)

(2) Nirgamaṁ tu punas tasya yāvad vai śesha-paṭṭikā ।
(*Matsya–Purāṇa*, Chap. CCLXII, v. 4.)

Chatur-diksku tathā jñeyaṁ nirgamaṁ tu tatoḥ budhaiḥ ।
(*Ibid.*, Chap. CCLXIX, v. 2.)

(3) Ashṭamāṁśena garbhasya rathakānāṁ tu nirgamaḥ ।
(*Agni–Purāṇa*, Chap. XLII, v. 13 ; *see also* v. 14.)

(4) Nirgamas tu śukāṅghreś cha uchchhrāya-śikharārddhagaḥ ॥
Chatur-dikshu tathā jñeyo nirgamas tu tathā budhaiḥ ॥ (9)
Bhāgam ekaṁ gṛihītvā tu nirgamaṁ kalpayet punaḥ ॥ (10)
Nirgamas tu samākhyātaḥ śeshaṁ pūrvavad eva tu ॥ (14)
Śukāṅghriḥ pūrvavaj jñeyā nirgamochchhrāyakaṁ bhavet ॥ (17)
(*Garuḍa–Purāṇa*, Chap. XLVII, vv. 4, 9, 10, 14,17.)

(5) Śālanāṁ tu chatur-dikshu chaika-bhāgāditaḥ kramāt ।
Pāda-bhāga-vivṛiddhyā cha ashṭa-bhāgāvasānakam ॥ (101)
Vinirgamasya chāyāmo tad-vṛiddhyā tasya vistaraḥ ॥ (102)
Nirgamo gopurāṇāṁ tu prākārād bāhyato bhavet ॥ (127)
(*Kāmikāgama*, XXXV, 101, 102, 127.)

Madhyāgāra-vinishkrānta-nirgameṇa samanvitaḥ ||
Nirgamas tu dvi-bhāgena vistāra-dv(a)yaṁśa-mānataḥ ||

(*Kāmikāgama*, XLV, 24, 26.)

Adhyardha-dvi-tri-daṇḍo vā nirgamaś chodgamo bhavet ||

(*Ibid.*, LIV, 21.)

(6) Sarveshām eva pādānāṁ tat-pādaṁ nirgaṁ bhavet ||
Of all columns the projection is one-fourth of the height.

(*Suprabhedāgama*, XXXI, 65.)

NIRGALA—A part of a swing, a moulding.

Āyase nirgalaṁ kuryād yojayet rajjum eva vā ||
Vastrordhve chaika-hastāntaṁ dolāyā phalakāntakam |
Tad-ūrdhve vājanāntaṁ syān nirgalāyāmam īritam |
Nirgalāgre dvayāgraṁ syāt phalakā-valayānvitam |

(*M.*, L, 168–171.)

NIRETANA—The forepart of the branch of an ornamental tree (kalpa-vṛiksha).

Cf. Bhramarair abhirāyuktaṁ sarva-śākhā-niretane |

(*M.*, XLVIII, 58.)

NIRYŪHA—A kind of a turret-like ornament on columns or gates a pinnacle, a turret; a chaplet, a crest, a head ornament, the crest of a helmet; a peg or bracket projecting from a wall to hang or place anything upon (*cf.* NĀGA-NIRYŪHA) ; wood placed in a wall for doves to build their nest upon : a door, a gate.

(1) Niryūhādyair alaṅkṛitya (*M.*, XLIX, 186, *etc.*).
(2) *Rāmāyaṇa :*
V. 9, 20 : Vimānair hema-niryūhaiḥ |
V. 9, 58 : Chāru-toraṇa-niryūhā (laṅkā) |
(3) *Mahābhārata :*
I. 43, 44 : Dvāra-toraṇa-niryūhair yuktaṁ nagaram |
I. 7, 96 : Aneka-vidha-prāsāda-harmya-valabhī-niryūha-śatasaṁ-kulaḥ (nāga-lokaḥ) |
(4) Harivaṁśa (*Pet. Dict.*), 5021 (5015, 5018, 5023) :
Nagaryāḥ paśchimaṁ dvāram uttaraṁ nāga-dvāraṁ pūrvaṁ nagara-niryūhaṁ dakshiṇaṁ nagara-dvāram |

NIRVĀSA-MAṆḌAPA—A pavilion for banishment, a private room.

Tat-pure'lindam ekāṁśam athavā nirvāsa-maṇḍapam |

(*M.*, XXXIV, 326, etc.)

NIRVYŪHA—A cross circle, a small tower.

Cf. Mahā-vāraṁ vimānordhve nirvyūhānana-saṁyutam ।

(*Kāmikāgama*, XLV, 17.)

NIVĀTA-BHADRAKA—A class of chariots.

(*M.*, XLIII, 113 ; *see* under RATHA.)

NIVEŚANA—A resting place, a stall for cattle, a colonial settlement.

(*R.-V.*, 19, 9 ; VII, 19, 5.)

NISHADAJA(-DHA)—A class of pavilions, a type of building.

(*M.*, XXXIV, 152 ; *see* under MAṆḌAPA.)

A class of buildings without the kūṭa-śālā (top-hall) but with eight other halls and eight aviaries :

Prāsādo nishadhas tatra kūṭa-śālā-vihīnakaḥ ।
Ashṭa-śālā-samāyuktaś chāshṭa-pañjara-saṁyutaḥ ॥

(*Suprabhedāgama*, XXXI, 45.)

NISHADYĀ—A bedstead, a couch, a hall, a shop, a market place.

(*Śiśupāla-vadha*, XVIII, 15, etc.)

NISHIDHI (*see* NISADDHI)—A monument.

NISHKALA—A site plan.

Yugmam nishkalaṁ proktam ayugmaṁ sakalam tathā ।

(*M.*, VII, 73 ; *see* under PADA-VINYĀSA.)

NISHKĀSA—A verandah, a portico, a balcony, a projection.

Prāg-grīvaḥ pañcha-bhāgena nishkāsas tasya chochyate ।
Kārayet sushiram tadvat prākārasya tri-bhāgataḥ ॥
Prāg-grīvaḥ pañcha-bhāgena nishkāsena viśeshataḥ ।
Kuryād vā pañcha-bhāgena-prāg-grivaṁ karṇa-mūlataḥ ॥

(*Matsya-Purāṇa*, Chap. CCLXIX, vv. 24-25.)

NISADDHI(NISĪDI) (*see* NISHIDHI)—A house for rest, a tomb, a monument.

(1) Rāmi seṭṭiyara Nisīdi—' The Nisīdi of Rāmi seṭṭi.'

' Nisīdi is given by Sanderson as a bill of acquaintance ; Dr. Bhau Dāji (*Journ. Bom. Br. R. As. Soc.*, Vol., IX, p. 315, Inscription, no. 4) translates it by house of rest, on the analogy of an inscription in the Udayagiri cave in Orissa ; this is probably its meaning as used here.' Dr. Fleet.—Sanskrit and old Kanarese Inscrip. no. LVI, *Ind. Ant.*, Vol. VIII, p. 246, note 48.)

(*Ep. Carnat.*, Vol. II, Inscriptions on Chandragiri, Vindhyagiri and in the town.)

(2) ' Erected a stone hall for gifts in Jinanāthapura and set up a tomb (nisidhiyaṁ) in memory of the Mahā-maṇḍalāchāryya Devakīrtti Paṇḍita Deva. (No. 40 ; Roman Text, p. 10, line 3 from the bottom upwards; Transl., p. 122, line 19 f.)

(3) ' By Mādhavachandra Deva was the tomb (Nishadyakākārayetā) raised to his memory.'. (No. 41 ; Roman Text, p. 12, line 15 ; Transl., p. 123, line 5.)

(4) ' The excellent minister Nāga-deva erected in memory of the famous Yogi Nayakīrtti . . . a tomb (nishidhyālayam) to endure as along as sun, moon and stars continue.' (No. 42 ; Roman Text, p. 16, line 10, Transl., p. 124, line 4.)

(5) ' Raised a tomb (nisidhigehaṁ) to her memory.' (No. 44 ; Roman, Text, p. 20, line 23 ; Transl., p. 125, line 20.)

(6) ' A group of tombs (nisidhikā), a collection of ponds and lakes, who (but him) made these in memory of Nayakirtti Deva Saiddhāntika.' (No. 90 ; Roman Text, p. 73, line 23 ; Transl., p. 159, line 1.)

(7) ' He, from devotion to his *guru*, set up his tomb (nishayām). (No. 105 ; Roman Text, p. 80, line 27 ; Transl., p. 165, line 30.)

(8) ' Māṅkabbe Ganti had erected a tomb (nisidhiggehadyam) for her *guru.* ' (No. 139 ; Roman Text, p. 110, line 6 from bottom upwards; Transl., p. 185, line 9.)

(9) ' Had a tomb (nisidhigeham) for him. ' (No. 144 ; Roman Text, p. 114, line 22 ; Transl., p. 8, line 9 from bottom upwards.)

(10) ' His son Taila-gauḍa made a grant for the god Śiḍḍeśvara and set up this monument (nisaddhi).'—(*Ep. Carnat.*, Vol. VII, Honnāli Taluq, no. 79 ; Transl., p. 174.)

(11) ' A third feature, even more characteristic of the style, is found in the tombs of the priests, a large number of which is in the neighbourhood of Moodbidri. Three of these are illustrated in the woodcut (no. 154, Fergusson). They vary much in size and magnificence, some being from three to five or seven storeys in height, but they are not, like the storeys of Dravidian temples, ornamented with simulated cells and finishing with domical roofs. The division of each storey is a sloping roof, like those of the pagodas at Katmandhu, and in China or Tibbet. '

(Fergusson, *Ind. and East. Arch.*, p. 275.)

In Bengal, especially in Comilla and Noakhali Districts, these tombs or monuments, which are even now built, have generally the cone-shape. At the bottom there is in most cases a square cell or chamber. They are sometimes constructed in groups and supplied with chambers at the top, *cf.* Chātkhil Noakhali.

NIHĀRA (*see* PRĀKĀRA)—A court of the compound, a courtyard.

Dvitīyam anta-nihārā cha madhyama-hārā tṛitīyakam ॥
(*M.*, xxxi, 11.)

NĪḌA—A nest, a lair, a covered place.

In connexion with buildings :

Nīḍasya chādho grīvo-vātāyanaṁ kārayet ।—(*M.*, xviii, 329.)
Toraṇair nīḍa-bhadrādi-mule chordhve cha bhūshitam ।
(*M.*, xx, 64.)

NĪPYA(? RA)—The lower portion, the end, the border as of a cloth
(*Mayamata*, xxxiii, 62, 63, 64.

NṚITTA(-TYA)-MAṆḌAPA (*see* MAṆḌAPA)—A detached building used as a music hall, a pavilion.

Nṛipāṇām abhishekārthaṁ maṇḍapaṁ nṛitta-maṇḍapam ।
(*M.*, xxxiv, 38, etc.)

A pavilion generally in front of a temple, where religious music is preformed (*Suprabhedāgama*, xxxi, 96, 98; *see* under MAṆḌAPA).

NETRA—The eye, a side portico or porthole, gable-window (*M.*, xxxiv, 396), a wing (*M.*, xxxv, 101), face (*M.*, xxxv, 257–260).

Same as LALĀṬA (*M.*, xxxv, 257–260).

NETRA-KŪṬA (*see* KARṆA-KŪṬA)—A front apartment, a side-hall, a corner-tower.

Pradhānāvāsa-netrastha-netra-kūṭa-dvayaṁ nyayet ॥
(*Kāmikāgama*, xxxv, 75.)

NETRA-BHADRA (*see* MUKHA-BHADRA)—A side tabernacle, side porch, portico.

Parito'lind(r)a-bhāgena vāraṇaṁ mukha-bhadrakam ।
Athavā netra-bhadraṁ syāt ।—(*M.*, xxxiv, 251–252.)
Karṇaika-kara-bhadraṁ syāt śālāgre netra-bhadrakam ।
(*M.*, xxxv, 246, etc.)

NETRA-BHITTI—A side-wall.

Dakshiṇe netra-bhittau vā grabhādhānaṁ prakīrtitam ।
(*Kāmikāgama*, xxxv, 46, etc.)

NETRA-ŚĀLĀ—A side-hall.

Tad-adho bhu-praveśe tu tad dvārasyāvasānakam ।
Shaṇṇāṁ vai netra-śālānām antarāle cha vā sthalam ॥
(*ibid.*, 81.)
Tach-chhālāyā dvi-pārśve tu netra-śāla sa-bhadrakam ।
(*M.*, xxvi, 40, etc.)

NEPHATHYA-GṚIHA—The green-room in a theatre (*see* details under NĀTYAGṚIHA).

NEMI (*see* PRĀKĀRA and PRADAKSHIṆA)—The circumference, a surrounding verandah or balcony.

(1) Nemiḥ pādena-vistīrṇā prāsādasya samantataḥ ।

(*Agni-Purāṇa*, Chap. CIV, v. 7.)

(2) Nemiḥ pādena vistīrṇā prāsādasya samantataḥ ।
Garbhaṁ tu dvi-guṇaṁ kāryyaṁ nemyā mānaṁ bhaved iha ॥

(*Garuḍa-Purāṇa*, Chap. XLVII, vv. 19–20.)

P

PAKSHA-(KA)—A side, a flank, a footpath.

In connexion with staircases (*M.*, XXX, 100, etc.).

In connexion with streets :

Evaṁ vīthir dvi-pakshaṁ syān madhya-rathyaika-pakshakā ।

(*M.*, XI, 350.)

In connexion with walls :

Anyat sālaṁ tu sarveshāṁ chaika-pakshālayākshma-kramāt ।
Anyat sālaṁ tu sarveshām ālayārthaṁ dvi-pakshakam ।

(*M.*, XXXVI, 86–87.)

Compare chatus-pakshām iva chhadiḥ (square roof), and

Yā dvipakshā chatush-pakshā shaṭ-pakshā yā nirmāyate ।
Ashṭā-pakshāṁ daśa-pakshāiṁ sālāṁ mānasya patnīm agnir garte ivāśaye ।

(*Atharva-Veda*, IX, 3.)

See further illustration under EKA-PAKSHA and DVI-PAKSHA.

PAKSHAGHNA—A type of building.

Yāmyā hīnaṁ chullī tri-śālakaṁ vitta-nāśa-karam etat ।
Pakshaghanam aparayā varjitaṁ suta-dhvaṁśa-vaira-karam ।

'A building lacking a southern hall is called chulli ; it causes loss of prosperity, one in which there is no western hall (the so-)called Pakshaghna, occasions the loss of children and (the) enmity.'—(*Bṛihat-Saṁhitā*, LIII, 38, *J.R.A.S.*, N. S., Vol. VI, p. 286.)

PAKSHA-ŚĀLĀ—A side-hall.

Madhya-koshṭhasya śāle tu bhadra-śālā viśeshataḥ ।
Paksha-śālānvitaṁ vātha ūrdhva-śālānvitaṁ tu vā ।

(*M.*, XXXIII, 518–519.)

PAṄKA—A moulding of the pillar.

Śikharasyordhve paṭṭochcham uttarochchaṁ samaṁ bhavet ।
Tad-ūrdhve vājanaṁ paṅkaṁ nimnaṁ kumbhaṁ saḍaṇḍakam ।
(*M.*, xv, 126–127.)

In connexion with joinery :

Eka-rūpa(ṁ) cha paṅkaṁ cha vidhiḥ syād eka-rupakam ।
(*M.*, xvii, 153.)

PACHANĀLAYA—A kitchen, the refectory of a temple.

Devānāṁ pachana-mandapam—' built a beautiful stone temple with the toraṇa-gate and the surrounding walls, having provided the temple with a flower garden, kitchen, pond and suitable environs.'—(*Ep. Carnat.*, Vol. x, Kolar Taluq, no. 132 ; Roman Text, p. 54 ; Transl., p. 49.)

PAÑCHA-TALA—The fifth storey, the five-storeyed buildings.
(*M.*, xxiii, 1–55.)

A description of the fifth storey (*M.*, xxxi, 48–51).

The eight classes (*ibid.*, 1–48 ; *see* under Prāsāda).

PAÑCHA-PRĀKĀRA-HARMYA—The various attached and detached buildings constructed in the five courts into which the whole compound is divided (*see* Prākāra).
(*M.*, xxxi, 2.)

PAÑCHA-BHŪMI (*see* Pañcha-tala)—The fifth storey, the five storeyed buildings.

PAÑCHA-ŚĀLĀ—The enclosure wall of the fifth court.
(*M.*, xxxi, 28, 29.)

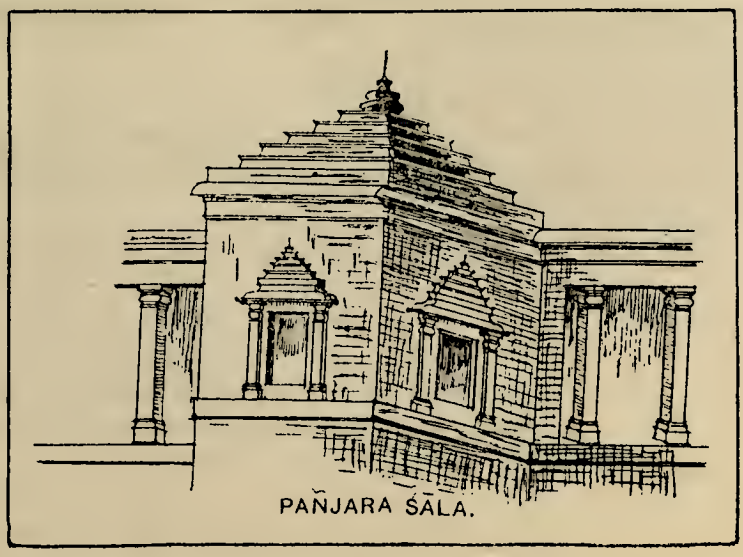
Cf. Tataḥ pañchama-sāla cha mahā-maryādim īritam ।
(*M.*, xxxi, 13, etc.)

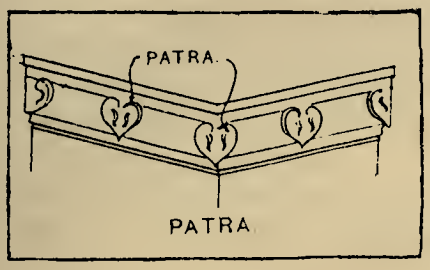
PAÑCHĀYATANA—A phallus with five heads.
(Chālukyān Architecture, *Arch. Surv.*, New Imp. Series, Vol., xxi, p. 39.)

PAÑJARA—A cage, an aviary, a nest, an architectural object, windows.

The cages for domestic birds and animals, such as pigeon, tiger, etc., are counted among the articles of furniture (*M.*, ṭ, 50–55), their architectural description (*ibid.*, 213–288).—(*Kāmikāgama*, lv, 134–146 ; *see* under Nāsikā.)

PAÑJARA-ŚĀLĀ—A small top-room, a small window, a class of storeyed buildings, a type of bedstead, a moulding, a nest-like architectural object.


PAÑJARA ŚĀLA.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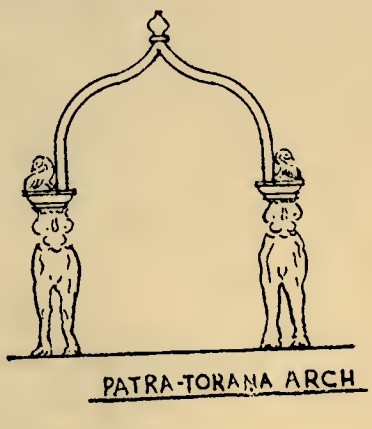
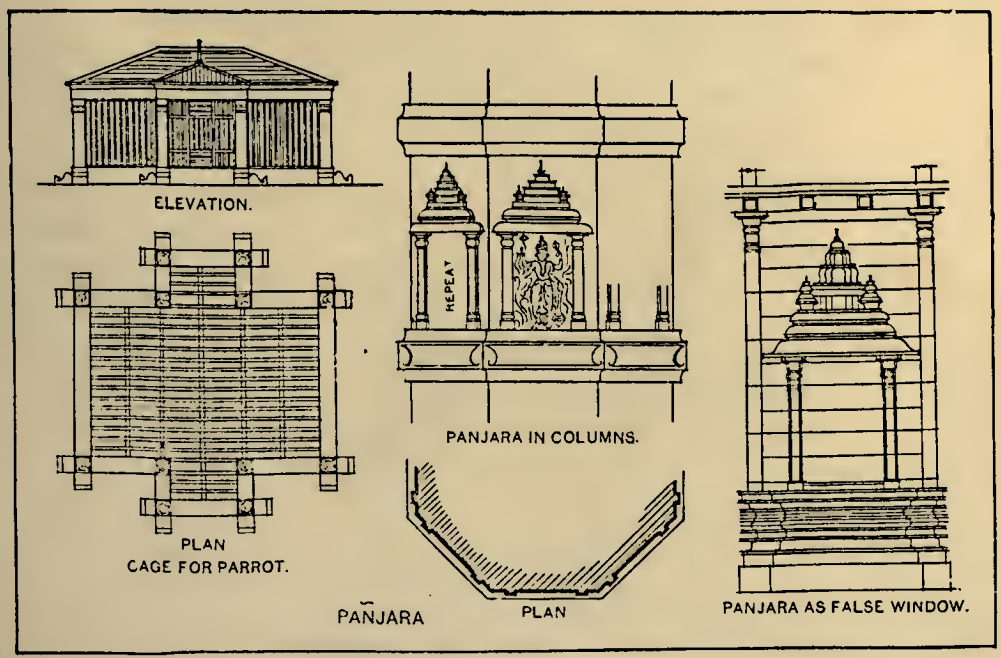

PATRA-TORANA ARCH


ELEVATION.
PLAN
CAGE FOR PARROT.
REPEAT
PANJARA IN COLUMNS.
PAÑJARA
PLAN
PANJARA AS FALSE WINDOW.

(1) *Mānasāra* :

A small room above the dome (stūpi) :

Etat pañjara-śālāṁ cha padmam ekaṁ śikhā-trayam ।

(*M.*, xv, 131.)

A class of the seven-storeyed buildings (*M.*, xxv, 27 ; *see* under Prāsāda).

A synonym of the bedstead (*M.*, iii, 11).

A member of the pillar (*M.*, xv, 89, 98, 99–103, etc.)

In connexion with buildings of one to twelve storeys :

Śālā-kūṭa-dvayor-madhye chaika-hārā sa-pañjaram ।

(*M.*, xix, 57 ; *see also* 178, etc.)

(2) *Kāmikāgama*, xxxv, 75 :

Pañjara-dvitayaṁ kāryaṁ karṇa-kūṭa-samodayam ॥

Ibid, l, 92 :

Kūṭa-śālānvitaṁ yat tu pañjaraiś cha samanvitam (vimānam) ॥

Ibid., lv, 196–198 (the synonyms of the pañjara) :

Pramāṇa-bhavanaṁ karma-prāsādasyāshṭakaṁ tathā ।
Sabheti kūṭa-nāma syāch chhāyā valabhī(r) eva cha ॥
Brahma-dvāraṁ tato madhye maṇḍapaṁ koshṭhake matam ॥
Ṛiju-vaktraṁ dvijāvāsaṁ krīḍaṁ syāt siṁha-vaktrakam ।
Pañjarābhidhānaṁ syāt ॥—(*See* further details under Nāsikā.)

(3) *Suprabhedāgama*, xxxi, 80 :

Eka-nāsikayā yuktaṁ pañjaraṁ samudāhṛitam ।
Kūṭeshu nāsika-yuktaṁ koshṭham etat prakīrtitam ॥

(*See also* v. 79, under Nāsikā.)

(4) 'Between the "karṇa-kūṭa" and "śālā" are found some kinds of little windows called pañjara.'—(*Dravidian Arch.*, by Jouveau-Dubreuil, ed. S. Krishnaswami Aiyangar, p. 5.)

(5) 'His son Kaṅgala-deva having wandered abroad (as a mendicant) and brought alms, had a kūṭa-pañjara made for the god Hanumanta, and that fame might come to all, had a lipi-śāsana made and set up it.'—(*Ep. Carnat.*, Vol., vii, Channegiri Taluq, no. 17, Transl., p. 180 ; Roman Text, p. 317.)

(6) *See* Chālukyān Architecture (*Arch. Surv.*, New Imp. Series, Vol. xxi, Plates xxvi, xcviii).

(7) *See Mysore Arch. Report* (1915–16, p. 22, Plate x, fig. 2).

(8) *See* Cunningham : *Arch. Surv.* (Vol. i, Plate v, p. 6).

PAṬṬA—
PAṬṬIKĀ—
PAṬṬI— } A band, a fillet, a moulding of the base, etc., an ornament for the body, a crown, a diadem, a turban, an upper garment, a cloth, a plate,

a slab, a seat, a junction, a town, an edict, a lintel (*M.*, XIX, 149), a staircase (*M.*, XXX, 140–143), a spoke (*M.*, XLIII, 11).

(1) 'It is often confounded with the moulding called "vājana" especially in pedestals and bases as it appears to be of the same form to be used in the same situation, and to have the same height and projection with the latter, but when employed in architraves and friezes its height and projection increases considerably.'—(Rām Rāz, *Ess. Arch. Hind.*, p. 25.)

(2) In connexion with the plough : phāla-paṭṭa, tri-paṭṭa, madhya-paṭṭa (*M.*, v, 52, 61, 73).

In connexion with the foundations :

Paṭṭikāntaṁ kshipech chāpi vinyaset prathameshṭakam ।

(*M.*, XII, 203.)

A crowning moulding of the pedestal (*M.*, XIII, 5, 49, 82, etc.; *see* the lists of mouldings under UPAPĪṬHA).

A moulding of the base (*M.*, XIV, 13, 26, 48, etc.; *see* the lists of mouldings under ADHISHṬHĀNA).

A moulding of the pillar (*M.*, XV, 121, 35, etc.).

In connexion with the staircase (*M.*, XXX, 140).

In connexion with the door (*M.*, XXXIX, 73, etc.).

In connexion with the bedstead (*M.*, XLIV, 18, 19, etc.).

An ornament for the body :

Kaṭi-sūtraṁ tu saṁyuktaṁ kaṭi-prānte sa-paṭṭikā ।

(*M.*, L, 27 ; *see also* 28, etc.)

Athavā ratna-paṭṭaṁ syāt svarṇa-tāṭaṅka-karṇayoḥ ।

(*M.*, LIV, 47.)

Compare 'Paṭṭa-dhara,' and 'Paṭṭa-bhāj,' meaning kings, with special crowns.—(*M.*, LI, 3, 4.)

(3) Bhāgais tribhis tathā kaṇṭaḥ khaṇṭha-paṭṭas tu bhāgataḥ ।
Bhāgā (? go) bhyāsam ūrdhva-paṭṭaś cha śesha-bhāgena paṭṭikā ॥
Nirgamas tu punas tasya yāvad vai śesha-paṭṭikā ॥

'The neck (of the pedestal of an idol or phallus) is made of three parts and the band of the neck of one part. The abhyāsa (?) is one part, the upper band is also one part, and the remaining part is paṭṭikā (fillet or band). Its projection should extend as far as the last paṭṭikā.'—(*Matsya-Purāṇa*, Chap. CCLXII, vv. 3, 4.)

(4) Vedikāṁ prastara-samāṁ shaḍ-aṁśīkṛitya bhāgaśaḥ ।
Ekāṁśaṁ prati-paṭṭaṁ syād aṁśābhyām antarī bhavet ॥
Ūrdhva-vājanam ekāṁśam aṁśaṁ tat-paṭṭikā bhavet ।
Ūrdhva-paṭṭaṁ tad-ekāṁśam antarī kusumair yutā ॥

(*Vāstu-vidyā, ed.* Gaṇapati Śastri, IX, 23, 24.)

(5) Polakeśir apy-avādid anujān pratibaddha-paṭṭam avantu ।

'Pulakesi too declared to his brethren (in the presence of his vassals) that they were to support the encircling diadem of his sons and grandsons.'—(Grant of Kusumāyudha IV, line 18, *Ind. Ant.*, Vol. xxxii, pp. 282, 284.)

PAṬṬANA(-ṆA) (*see* PATTANA)—A town, a commercial city accessible by water-ways.

(1) *Kauṭilīya-Artha-śāstra* (Chap. xxii, p. 46, footnote) :

Pattanaṁ śakaṭair gamyaṁ ghāṭikair naubhir eva cha ।
Naubhir eva tu yad gamyaṁ paṭṭaṇaṁ tat prachakshate ॥
Droṇa-mukhaṁ jala-nirgama-praveśaṁ paṭṭaṇam ity-arthaḥ ।

(*Rāyapasenī-sūtra-vyākhyāne*, p. 206.)

(2) Karya-vikraya-saṁyuktam abdhi-tīra-samāśritam ।
Deśāntara-gata-janair nānā-jātibhir anvitam ॥
Paṭṭanaṁ tat samākhyātaṁ vaiśyair adhyushitam ॥

(*Kāmikāgama*, xx, 8, 9.)

PAṬṬA-BANDHA—The coronation, a crown, a class of bases comprising four types which differ from one another in height and in the addition or omission of some mouldings.

See the lists of mouldings under ADHISHṬHĀNA (*M.*, xiv, 297–304).

A part of the crown (*M.*, l, 111).

Nija-paṭṭa-bandha-samaye—'at the time of his coronation.'—(Six Eastern Chalukya Grants, Bervāḍa Plates of Chalukya-Bhima I, line 20, *Ep. Ind.*, Vol. v, pp. 129, 130.)

Godāvarī-taṭa-samīpasthe Kapitthakagrāme paṭṭa-v(b)andha-mahotsave tulā-purusham āruhya.

'The term Paṭṭabandha, which literally means "binding of the fillet" has been generally supposed to signify "coronation ceremony." But, it does not suit here.' Mr. D. R. Bhandarkar.—(Cambay Plates of Govinda IV, line 46, *Ep. Ind.*, Vol. vii, pp. 40, 27, note 2.)

Śrī-paṭṭa-bandhotsavāya Kurundakam āgatena mayā ।

(The grants of Indraraya iii, no. 11, line 47, *Ep. Ind.*, Vol. ix, pp. 36, 40, 25, note 2 refers to Vol. vii, p. 27, note 2.)

Coronation and crown :

. . . dvā-daśa-varshe tu janmanaḥ paṭṭam ।
Yo'dhād udaya-girīndro ravim iva lokānurāgayā ॥

'Put on to please the world the fillet (crown) in the twelfth year of (his) birth.'

Niravadya-dhavalaḥ Kaṭaka-rāja-paṭṭa-śobhita-lalāṭaḥ—' (his son was) Niravadyadhavala, whose forehead was decorated with the fillet (crown) of Kaṭakarāja.' Dr. Hultzsch.—(Maliyapundi grant of Ammaraja II, lines 40, 45, *Ep. Ind.*, Vol. IX, pp. 53, 55, 56.)

PAṬṬA-ŚĀLĀ—A religious establishment.

See Mandhata Plates of Jayasiṁha of Dhara (line 11, *Ep. Ind.*, Vol. III, pp. 49, 47).

Cf. ' (To provide) for the eight kinds of ceremonies of the god Mallinātha of the paṭṭa-śālc(lā) which they had made within precincts of that Śāntinātha basadi.'—(*Ep. Carnat.*, Vol. V. Part I, Belur Taluq, no. 129; Transl., p. 86; Roman Text, p. 193.)

PAṆḌI-ŚĀLĀ—A kind of hall, a two-storeyed mansion consisting of a single row of building which look like a broken staff at the forehead part above the second storey.

(*M.*, XXXV, 97; *see* details under ŚĀLĀ.)

PATTANA (*see* PAṬṬANA)—A village, a town, a commercial city on the bank of a river or sea, a new settlement.

(1) A village inhabited mostly by traders (Vaiśyas).

(*M.*, IX, 456–457.)

A town (*M.*, X, 40).

A seaside commercial city :

Abdhi-tīra-pradeśe tu nānā-jāti-gṛihair vṛitam ।
Vanig-jātibhir ākīrṇaṁ kraya-vikraya-pūritam ।
Ratnair dvīpāntarair nityaiḥ kshaumaiḥ karpūrādibhiḥ ।
Etat pattanam ākhyātaṁ vaprāyata-samanvitam ।

(*M.*, X, 63–66.)

(2) A seaside commercial city inhabited mostly by tradesmen.

(*Kāmikāgama*, XX, 8, 9; *see* under PAṬṬANA.)

(3) *Kauṭilīya-Artha-śāstra* (Chap. XXII, p. 46, footnote) :

Pattanaṁ śakaṭair gamyaṁ ghāṭikair naubhir eva cha ।
Naubhir eva tu yad gamyaṁ paṭṭaṇaṁ tat prachakshate ॥

(*Rāyapasenī–sūtra-vyākhyāne*, p. 206.)

(4) Pattanāni jala-sthala-pathayor anyatara-yuktāni ।

(*Praśna–vyākaraṇa-sūtra-vyākhyāne*, p. 306.)

(5) Tad-bhuktau pattanaṁ ramyaṁ śamīpātīti nāmakam ।

(The Chahanas of Marwar, no. IV, Sevāḍi stone inscrip. of Katukarāja, v. 6, *Ep. Ind.*, Vol. XI, p. 31.)

(6) ' Piriya-Rājaiya-Deva, son of—, caused this town (paṭṭaṇa) to be rebuilt and gave it the name of Piriyarāja paṭṭana (paṭaṇa in

the text) after himself. . . . Whoever calls it Siṅgapaṭṭana is guilty of killing his father and mother.'—(*Ep. Carnat.*, Vol. IV, Hunsūr Taluq, no. 15 ; Transl., p. 84 ; Roman Text, p. 135–136.)

(7) Dvā-triṁśa(t) tu velāvuramum ashṭādaśa-paṭṭanamuṁ bāsashṭi yoga-pīṭhamum—' (the people of) the thirty-two seaside towns, the 18 towns, 62 seats of contemplation. . . . (held a convocation there).'—(Old Kanarese Inscrip. at Terdāl, line 60, *Ind. Ant.*, Vol. XIV, pp. 19, 25.)

(8) Grāma-nagara-kheḍa-karvvaḍa-maḍaṁba-droṇamukha-pattanaṁgaḷiṁdam aneka-māṭa-kūṭa-prāsāda-devāyatanaṁgaḷi-dam oppuvaagrahāra-paṭṭaṇaṁgaliṁdam atiśayav-appa. . . . '

'[At Teridāla, a merchant town situated in the centre and the first in importance among the twelve (towns) in the glorious Kuṇḍi Three Thousand, adorned with] —villages, towns, hamlets, villages surrounded by hills, groups of villages, sea-girt towns, and chief cities, with elegant mansions, palaces and temples, and with shining agrahāra-towns in the country of Kuntala. . . . '—(Old Kanarese Inscrip. at Terdal, line 58, *Ind. Ant.*, Vol. XIV, pp. 19, 25.)

(9) ' With myriads of people, practices of virtues, agreeable occupations, streams of the (nine) sentiments, pleasure gardens, separated lovers, splendid tanks, full lotus beds, gilded boats for spring festivals, ghaṭikā-sthānas (religious centres), the supports of dharmma and mines of enjoyments, moats which were as if the sea being overcome had returned here on account of the collection of gems, groups of the lotus faces of beautiful women fair as the moon (grāma-nagara-kheḍa-kharvvaṇa-maḍamba-droṇa-mukha-pura-pattana-rāya-dhāni), on whatever side one looked in these nine forms did the Kuntala deśa shine. '

(It should be noticed that the passage within brackets is almost indentical with the corresponding passages in quotation no. 8 above).—(*Ep. Carnat.*, Vol. VII, Shikārpur Taluq, no. 197; Transl., p. 124, para. 1, last seven lines, Roman Text., p. 124, line 27 f.)

PATRA—A leaf, a leaf-like ornament, a moulding.

An ornament of the pillar (*M.*, XV, 36, etc.).

A member of the śālā or hall (*M.*, XXXV, 402).

Cf. Vatsarārambha-lekhārthaṁ patram—A leaf for writing the almanac on.—(*M.*, L, 49.)

In connexion with the balance (tulā) (*M.*, L, 190–191, 197, 199).

See more details under BHŪSHAṆA.

PATRA-PAṬṬA—A leaf-shaped diadem, a moulding.

A turban or crown (*M.*, XLIX, 16).

A moulding of the base (*M.*, XIV, 345).

PATRA-KALPA—A set of ornaments for the use of kings and gods.

(*M.*, L, 3, 6 ; *see* under BHŪSHAṆA.)

PATRA-TORAṆA—An arch (*see* details under TORAṆA.)

Bāla-chandra-nibhaiḥ patraiś chitritaṁ patra-toraṇam ॥

(*Kāmikāgama*, LV, 64.)

PATRA-BANDHA—A type of entablature (*see* details under PRASTARA).

Pāda-vistāra-saṁyuktaṁ patra-bandham iti smṛitam ।

(*Ibid.*, LIV, 6.)

PATRA-VALLI-(KA)—A moulding of the entablature (*M.*, XVI, 54), of the arch (*M.*, XLVI, 65).

See more details under PRASTARA.

PATHA—A road, a street, a way, a path.

(1) *Kauṭilīya-Artha-śāstra* (measures of various paths):

Antareshu dvi-hasta-vishkambhaṁ pārśve chatur-guṇāyāmam anu-prākāram ashṭa-hastāyataṁ deva-pathaṁ kārayet ।

Daṇḍāntarā dvi-daṇḍāntarā vā chāryāḥ (ashṭa-hasta-pramāṇa-mārgaḥ-Rāyapasenī-sūtra-vyākhyāne, p. 13) kārayet ।

Bahir jāuu-bhāginīṁ tri-śūla-prākāra-kūṭāvapāta-kaṇṭaka-prati-sarādi-pṛishṭha-tāla-patra-śṛiṅgāṭaka-śva-daṁshṭrārga-lopaskan-dana-pādukāmbarīsodapānakaiḥ chhanna-pathaṁ kārayet ।

(Chap. XXIV, p. 52–53.)

Trayaḥ prāchīnā rāja-mārgās traya undīchīnā iti vāstu-vibhā-gaḥ ।

Sa-dvā-daśa-dvāro yuktodaka-bhūmich-chhanna-pathaḥ ।

Chatur-daṇḍānatrā rathyā rāja-mārga-droṇa-mukha-sthānīya-rāshṭra-vivīta-pathaḥ ।

Sayonīya-vyūha-śmaśāna-grāma-pathās chāshṭa-daṇḍāḥ ।

Chatur-daṇḍas setu-vana-pathaḥ ।

Dvidaṇḍo hasti-kshetra-pathaḥ ।

Pañchāratnayo ratha-pathāś chatvāraḥ paśu-pathāḥ ।

Dvau kshudra-paśu-manushya-pathaḥ ।

(Chap. XXV, 54–55.)

PADA—A part, the foot, a plot of the site plan (*see* PADA-VINYĀSA).

(1) Vāstu-yāga-tattva by Raghunandana quotes from the *Liṅga-Purāṇa* without further reference :

Chatuḥ-shashṭi-padaṁ vāstu sarva-deva-gṛihaṁ prati ।

Ekāśīti-padaṁ vāstu mānushaṁ pratisiddhidam ॥

(2) *Bṛihat-Saṁhitā* (LIII, 42) :

Ekāśīti-vibhāge daśa daśa pūrvottarāyatā rekhāḥ ।

Varāhamihira apparently dees not give differcnt rules for temples and residential buildings.

(3) The foot ; the site plan (*M.*, LVII, 47, etc. ; VII, 1–267 ; *see* under PADA-VINYĀSA).

PADA-VINYĀSA—The plan, the site plan.

'The plan is the respresentation of the horizontal section of a building, showing its distribution, the form and extent of its various parts This is the geometrical plan where the parts are represented in their natural properties. The modern architects consider other plans too : in the perspective plan objects are represented on a definite surface so as to form a certain position to affect the eye in the same manner as the objects themselves would ; while in the raised plan the elevation of a building is shown.'-- (Gwilt : *Encycl. of Arch.*, Glossary, p. 1240.)

(1) *Mānasāra* (Chap. VII, named PADA-VINYĀSA) 1-267 :

The geometrical plans concerning the site, rather than a building, are described in this chapter (lincs 1-267). There is no mention of the perspective or the raised plan. What is given there is all about the site or the plot or the piecc of ground selected to receive the building. Thirty-two kinds of square plans are described (lines 2–40). They are designated by technical names. The first one is a site of one plot, which may be square, rectangular, round, oval or sixteen-sided, it is called *Sakala*. The second is of 4 plots, named *Paiśācha* or *Pechaka* ; the third, *Pīṭha*, is of 9 plots ; the fourth, *Mahāpīṭha*, is of 16 plots ; the fifth, *Upapīṭha*, is of 25 plots ; the sixth, *Ugra-pīṭha*, is of 36 plots ; the seventh, *Sthaṇḍila*, is of 49 plots ; the eighth, *Chaṇḍita*, is of 64 plots ; the ninth, *Parama-śāyika*, is of 81 plots ; the tenth, *Āsana*, is of 100 plots ; the eleventh, *Sthānīya*, is 121 plots ; the twelfth, *Deśya*, is of 144 plots ; the thirteenth, *Ubhaya-chaṇḍita*, is of 169 plots ; the fourteenth, *Bhadra*, is of 196 plots ; the fifteenth, *Mahāsana*, is of 225 plots ; the sixteenth, *Padma-garbha*, is of 256 plots ; the seventeenth, *Triyuta*, is of 289 plots ; the eighteenth, *Karṇāshṭaka*, is of 324 plots ; the nineteenth, *Gaṇita*, is of 369 plots ; the twentieth, *Sūrya-viśālaka*, is of 400 plots ; the twenty-first, *Susaṁhita*, is of 441 plots ; the twenty-second, *Supratikānta*, is of 484 plots ; the twenty-third, *Viśālaka*, is of 529 plots ; the twenty-fourth, *Vipra-garbha*, is of 526 plots ; the twenty-fifth, *Viveśa*, is of 625 plots ; the twenty-sixth, *Vipula-bhoga*, is of 676 plots ; the twenty-seventh, *Viprakānta*, is of 729 plots ; the twenty-eighth, *Viśālāksha*, is of 784 plots ; the twenty-ninth, *Vipra-bhakti*, is of 841 plots ; the thirtieth, *Viśveśa-sāra*, is of 900 plots ; the thirty-first, *Iśvarakānta*, is of 961

plots ; and the thirty-second, *Chandrakānta*, is of 1,024 plots (*M.* VII, 2–50, *see also* 51—271).

(2) Nagara-grāma-durgādyā(-der) gṛiha-prāsāda-vṛiddhaye ।
Ekāśīti-padair-vastu(ṁ) pūjayet siddhaye dhruvam ॥
(*Agni-Purāṇa*, Chap. CV, v. 1.)

(3) *See* Cunningham, *Arch. Surv. Reports*, Vol. II, Plate XCVII (site plans of Śaiva temples), p. 419 ; Plate XCVIII (site plans of Vaishṇava temples), p. 421 ; Vol. XX, Plate XX (site plan of a Jaina temple) ; Vol. XXI, Plate XLII (site plan of Slab temples of Kundalpur) ; Vol. XXIII, Plate XVIII (site plan of Jaina temple of Naulakha, mark the Svastika figures) ; Vol. XII, Plate V (plan of a temple) ; Vol. XVII Plate XXI (peculiar plan of a temple).

(4) *See* elements of *Hindu Iconography*, by T. A. Gopinatha Rao (Appendix A, pp. 1–45, diagrams facing pp. 1, 11).

PADMA-(KA)—A lotus, an eye, a moulding, a cyma recta, a cyma reversa or reversed cyma also called ogee or talon (*see* Gwilt, *Encycl.*, figs. 869, 869), a site plan, a pavilion, a type of village, a class of buildings.

(1) 'The moulding, called Padma (abja, ambuja or saroruha, etc.), literary lotus, is supposed to resemble a petal of that flower. It is a sort of compound figure, partly convex and partly concave ; and its section is composed of two opposite curves, meeting at the bisecting point of a line drawn between the points of recess and projection, and very much resembling the "cyma recta" and "cyma reversa" of the Western architects. This moulding is distinguished into greater and less, and forms the principal ornaments of Indian architecture. It is generally employed, in detached pairs, in bases and cornices, one facing the other in opposite directions, and is formed upright or the reverse according to its situation, either as a crowning member of the former or the supporting ornament of the latter. The concave part of it, when placed with its bottom reversed, is often so designed as to project forward or rise up, after having touched as it were, the fillet below, with a small perpendicular curvature, resembling in shape the petal of the lotus, with its pointed head somewhat inclined towards the top. In some specimens, this moulding is placed at the base of columns, and looks very much like an apophyge or ogee of the Ionic and Corinthian orders being formed either with a curved line having more or less convexity at the top, or with an upright tangent to the concave part below. It is sometimes made exactly in the form of an ovolo of the Western architects.'—(Rām Rāz, *Ess. Arch. Hind.*, p. 32–24.)

Mānasūra :

A site plan (*M.*, VIII, 36 f., *see* PĀDA-VINYĀSA).

A kind of village (*M.*, IX, 2 ; *see* under GRĀMA).

A moulding of the pedestal and the base (*M.*, XIII, 41, 61, 64, 68, etc. ; XIV, 68, etc. ; *see* the tests of mouldings under UPAPĪṬHA and ADHISHṬHĀNA).

A type of pavilion :

Evaṁ tu padmakaṁ proktaṁ devānāṁ pachanālayam ।
Padmākhyaṁ pushpa-maṇḍapam. . . . ।

(*M.*, XXXIV, 173, 180 ; *see* MAṆḌAPA.)

A moulding of pīṭha or the pedestal of the phallus (*M.*, LII, 31).

(3) Stambhaṁ vibhajya navadhā vahanaṁ bhāgo ghaṭo'sya bhāgo'-nyaḥ ।
Padmaṁ tathottaroshṭhaṁ kuryād bhāgena bhāgena ॥

Here, Kern's rendering of ' padma ' by ' capital ' seems untenable.

(*Bṛihat-Saṁhitā*, LIII, 29, *J.R.A.S.*, N. S., Vol. VI, p. 285 ; *see* details under STAMBHA.)

A type of building which is planned like a lotus, has only one storey and one spire, and is (?) 8 cubits wide (śayānashṭau) :

(4) *Bṛihat-Saṁhitā* (LVI, 23, *see* under PRĀSĀDA).

(5) *Matsya-Purāṇa* (Chap. CCLXIX, vv. 30, 39, 49, 53 ; *see* under PRĀSĀDA).

(6) *Bhavishya-Purāṇa* (Chap. CXXX, v. 30 ; *see* under PRĀSĀDA).

A class of round buildings :

(7) *Agni-Purāṇa* (Chap. CIV, vv. 17–18 ; *see* under PRĀSĀDA).

(8) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 21, 23, 28–29 ; *see* under PRĀSĀDA.)

PADMA-KĀNTA—A special type of pillar (*M.*, XV, 38). It is based on a seat (āsana), plinth or lotus (cyma). Its cornice or edge of the capital is decorated with opening buds. Its base is decorated with a bridge-like moulding (pālikā). The ornamental fillets are constructed and two aṅgulas (1½ inches) on all sides are adorned with foliage, jewels, flowers, etc. (*ibid.*, 30–37).

A class of the six-storeyed buildings (*M.*, XXIV, 3–12 ; *see* under PRĀSĀDA).

PADMA-KEŚ(-S)ARA—A type of base, a kind of throne.

A class of bases (*M.*, XIV, 81–94 ; *see* under ADHISHṬHĀNA).

A type of throne (*M.*, XLV, 11–12 ; *see* under SIṀHASANA).

PADMA-GARBHA—A site plan in which the whole area is divided into 256 squares.

(*M.*, VII, 21.)

PADMA-PĪṬHA—A lotus-shaped pedestal for an image.

(*M.*, LI, 86.)

PADMA-BHADRA—A type of throne.

(*M.*, XLV, 12 ; *see* under SIṀHĀSANA.)

PADMA-BANDHA—A class of bases comprising four types which differ from one another in height and in the addition or omission of some mouldings.

(*M.*, XIV, 170–194 ; *see* the lists of mouldings under ADHIṢṬHĀNA.)

A base (*cf. Suprabhedāgama*, XXX, 18–22) :

Utsedhaṁ sapta-viṁśat tu dvi-bhāgā paṭṭikā bhavet ॥
Ekāṁśaṁ dalam evoktam upānaṁ chaika-bhāgikam ।
Jagatī tu shad-aṁśā syād dvi-bhāgārdha-dalī-kramāt ॥
Ardha-bhāgaṁ bhavet skandhaṁ bhāgam ūrdhva-dalaṁ tathā ।
Tri-bhāgaṁ kumudaṁ vidyād adho'bjaṁ bhāgam eva tu ॥
Paṭṭikā chaika-bhāgā tu grīvā chaiva dvi-bhāgikā ।
Tad-ūrdham eka-bhāgaṁ tu padma-bandhaṁ tata upari ॥
Dvi-bhāgā paṭṭikā yā tu eka-bhāgena yojanaṁ ।
Tad vṛiteś chaika-bhāgaṁ tu padma-bandham iti smṛitam ॥

PADMĀSANA—A lotus seat, a lotus-like posture in which an image is carved, a throne, a type of base, a kind of pedestal.

A lotus-shaped pedestal and base of a column (*M.*, XV, 67 ; XLVII, 19).
A type of throne (*M.*, XLV, 12 ; *see* under SIṀHĀSANA).
A lotus-shaped pedestal for an image (*M.*, LIV, 36, etc.).

PARAṬA (corrupted into PĀRAṬA)—The parapet, the coping of a wall.

Cf. Bādāviya Durggavanu mūḍaṇa pāraṭavanu Chāmarāja—'Chāmarāja constructed the fort and the eastern parapet of that same Bādāvi.'—(Sanskrit and Old Kanarese Inscrip., no. LXXXVII, lines 13, 14, *Ind. Ant.*, Vol. x, p. 63, notes 51, 53.)

PARAMA-ŚĀDHI(-YI)KA—A site plan in which the whole area is divided into 81 equal squares (*see* PADA-VINYĀSA).

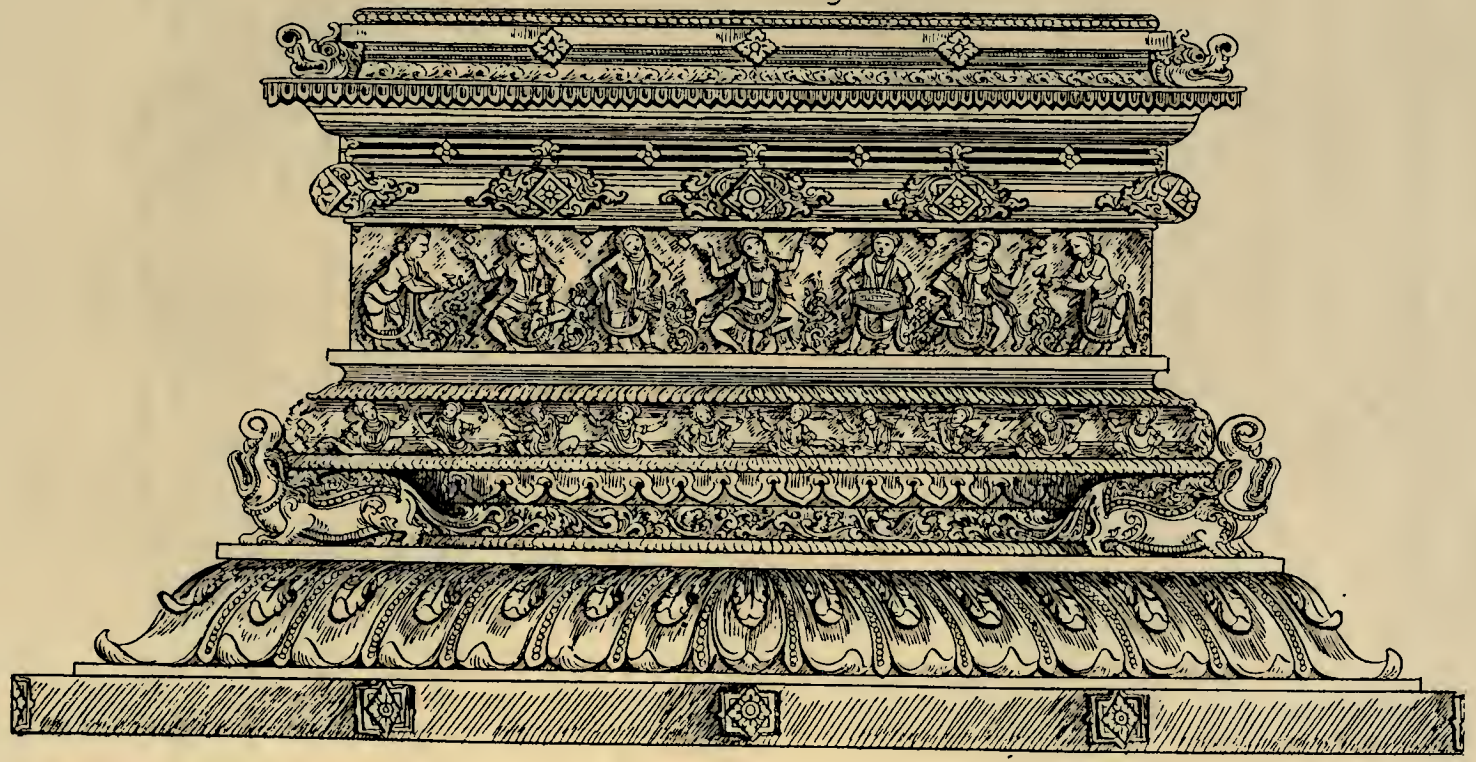
(*M.*, VII, 10, 72, 110 : almost same in *Bṛihat-Saṁhitā*, LIII, 42 f.)

In connexion with the plan of a village (*M.*, IX, 174) and of a wall (*M.*, XL. 72).

PARĀRTHA-LIṄGA—A phallus for the public worship.

(*M.*, LII, 243 ; *see* details under LIṄGA.)

PARIKHĀ—A ditch, a moat, a trench round a fort or town.



PADMASĀNA

(1) *Mānasāra* :

In connexion with a village and a fortified city :

Vaprāṁśa-bhitti-rakshārthaṁ paritaḥ parikhānvitam ।

(*M.*, IX, 354.)

Sarveshām api durgāṇāṁ vapraiś cha parikhair vṛitam ।

(*M.*, X, 106.)

Bāhye prākāra-saṁyuktaṁ paritaḥ parikhānvitam ।

(*M.*, IX, 450.)

Paritaḥ parikhā bāhye vapra-yuktaṁ tu kārayet ।

(*M.*, X, 108.)

Paritaḥ parikhā bāhye kuryād grāmeshu sarvaśaḥ ।

(*M.*, IX, 62, etc.)

(2) *Kauṭilīya-Artha-śāstra* (Chap. XXIV, pp. 51, 56, paras. 2, 3) :

Tasya parikhās tisro daṇḍāntarā kārayet chatur-daśa dvā-daśa daśeti daṇḍānuvistīrṇāḥ vistārād avagāḍhāḥ pādūnam ardhaṁ vā tri-bhāga-mulā mūle chaturaśrāḥ pāshāṇopahitāḥ pāshāṇeshṭakā-baddha-pārśvā vā toyāntikoragās tu toyapūrṇā vā sa-parivāhāḥ padma-grahatiḥ ।

Chatur-daṇḍāvakṛishṭaṁ parikhāyāḥ shaḍ-daṇḍochchhritam ava-ruddhaṁ tad-dviguṇa-vishkambhaṁ khātād vapraṁ kārayet ।

Ibid., Chap. XXV, para. 1 :

Dvārāṇi bahiḥ parikhāyāḥ ।

(3) Durga-gambhīra-parikhāṁ durgām anyair dur-āsadām ।
Sarvataś cha mahā-bhīmāḥ śīta-toyāśayāḥ śubhāḥ ॥
Agādhā grāha-saṁpūrṇāḥ parikhā mīna-sevitāḥ ॥

(*Rāmāyaṇa*, I, 5, 13, 15.)

Yantrais tair avakīryante parikhāsu samantataḥ ॥
Parikhāś cha śataghnyaś cha yantrāṇi vividhāni cha ॥

(*Ibid.*, VI, 3, 17, 23.)

Parikhābhiḥ sapadmābhiḥ sotpalābhir alaṁkṛitam ॥

(*Ibid.*, VI, 5, 2, 14.)

(4) Parighe for Parikhe (Satyamangalam plates of Devaraya II, v. 22, *Ep., Ind.*, Vol. III, pp. 38, 40).

(5) Durllaṁgha - dushkara - vibheda-viśāla - sāla-durggādha - dustara-bṛihat-parikhā-paritā ।

'(The city of Kañchī) whose large rampart was insurmountable and hard to be breached (and) which was surrounded by a great moat, unfathomable and hard to be crossed.'—(Gadval Plates of Vikramāditya I, v. 6, line 21, *Ep. Ind.*, Vol. X, pp. 103, 105.)

(6) Kanakojjvala-sāla-raśmi-jālaiḥ parikhāmbu-pratibimbitair alaṁ yā
vasudheva vibhāti bāḍabārchchir vṛita-ratnākara-mekhalā-paritā ॥

'Through the mass of the rays (which issue from) its golden walls, and which are reflected in the water of its moat, this (city, Vijayanagara) closely resembles the earth, that is surrounded by the girdle of the ocean, which is encircled by the lustre of the submarine fire.'—(Vijayanagara Inscrip. of Devaraja II, lines 7–8, *H.S.I.I.*, Vol. I, no. 153, pp. 162, 164.)

(7) Durge subhima-parighe Maḷavaḷḷi nāmni—'in the fort named Maḷavaḷḷi, having a deep moat.'—(*Ep. Carnat.*, Vol. III, Malavalli Taluq, no. 61, Roman Text, last verse, p. 126 ; Transl., p. 62.)

PARIKHĀ-DURGA—A ditch-fort, a fort.

For details *see* Śukranīti, etc., under DURGA.

PARIGHA(-GHĀ)—Cross-bars to fasten the door, a beam ; metal bolts.

(*Chhand. Upanishad*, II, 24, 6, 10, 15.)

(1) Dvau dvau parighau (*Kauṭilīya-Artha-śāstra*, Chap. XXXIV, p. 53).

Chatvāro hasti-parigha—'four beams to shut the door against elephants.'—(*Ibid.*, Chap. XXIV, p. 53.)

(2) Dṛidha-vaddha-kapāṭaṁ mahā-parighavanti cha ।

(*Rāmāyaṇa*, VI, 3, 11.)

PARIṆĀHA—Otherwise called Mārga, Praveśa, Pariṇāha, Nāha, Vṛiti, Āvṛiti and Nata, the width, breadth, circumference, extent.

Grīvā-madhya-pariṇāhaś chatur-viṁśatikāṅgulaḥ ।
Nābhi-madhya-pariṇāho dvi-chatvāriṁśad-aṅgulaḥ ।
The width by the middle of the neck is 24 angulas.
The width by the middle of the navel is 42 aṅgulas.

(*Matsya-Purāṇa*, Chap. CCLVIII, vv. 43, 58 ; *see also* vv. 41, 47, 50, 51, 53, 54, 55, 56, 57, 59, 63, 66, etc.)

See Mānasāra (LX, 68, etc.) ; *Kirātārjunīya* (XII, 20, etc.) ; *Mṛichchhakaṭika* (III, 9, etc.) ; *Mahāvīra-charita* (VII, 24, etc.) ; *Mālatī-mādhava* (III, 15 : *Stana-pariṇāha*, etc.) ; *Ratnāvalī* (II, 13, etc.) ; *Śiśupāla-vadha* (I 19, etc.).

PARIMĀṆA—The measurement of width or circumference.

(*M.*, LV, 3–9 ; *see* under MĀNA.)

PARIRATHYĀ—A road suitable for chariots (*A.-V.*, VII, 8, 22 ; XII, 1, 47).

PARIVĀRA(-RĀLAYA)—The family ; the attendant deities ; the subordinate temples, attached or detached, of a large religious establishment, where the attendant deities are enshrined.

(1) *Mānasāra*, Chap. XXXII (named Parivāra) :

The temples of these deities are stated to be built round the Prākāra (the fourth enclosure):

Sarveshām api devānāṁ prākārānta-pravishṭake ।
Paritaḥ parivārāṇāṁ lakshanaṁ vakshyate' dhunā । (1–2)

At the eight cardinal points of the innermost or the first cour the temples of the group of eight deities are built (lines 3–5). The groups of sixteen and thirty-two deities are housed in the second and the third court respectively (lines 6–7). Between the third and the fifth court is stated to be the Viniyoga (offering)-pavilion (line 8). The description of the location of temples for each of the deities of these three groups is given (lines 10–119). The temples of the attendant deities of Vishṇu are specified (lines 121–156). The temples and the attendant deities of Gaṇeśa and Kshetrapāla and also those of Buddha, Jina and all such petty (kshudra) gods are passed over and stated to be built in accordance with the rules of *Śāstras* (lines 157–166).

It should be noticed that the description of temples intended for so many deities does not contain any measurement, etc. It is solely occupied with the position of these temples or deities in the compound. But a considerable portion of the chapter is devoted to the description of the maṇḍapas (pavilions) for such purpose as bath, bed, assembly, horses, musicians, dancing girls, and cows, etc. (lines 67–101).

(2) Ete parivārā vāstoḥ pūjanīyā prayatnataḥ ।

(*Mahānirvāṇa-Tantra*, XIII, 45.)

(3) Pārśvataś chāpi kartavyaṁ parivārādikālayam ।

At the side (too) should be built temples for the attendant and other deities.

(*Matsya-Purāṇa*, Chap. CCLXX, v. 30.)

(4) Parivārālaye tuṅga-harmye anyasmin prakalpayet ॥

(*Kāmikāgama*, L, 69.

Parivārālayānāṁ tu kūlavat karma chācharet ।
Sālānāṁ tu chatushkoṇeshv-ishṭa-deśe pragṛihyatām ॥
Mālikā-yukta-sālaṁ chet koṇa-stambhe dvitīyake ।
Prathamāvaraṇe vāpi dvitīyāvaraṇe nyaset ॥

(*Ibid.*, XXXI, 95, 96.)

(5) Pañcha-prākāram evaṁ syāt parivārālayaṁ śṛiṇu ||
Prāsādasya chaturthaṁ vā tad-ardhaṁ vārdham eva vā |
Mātṛīṇām (of female deities) ālayaṁ kuryād gopurākāram eva tu ||
Hasti-pṛishṭhaṁ tapa (taṁ) proktaṁ prāsādaṁ tu viśeshataḥ |
Madhyaṁ tu pachanākāraṁ chatuḥ-sālaika-śālakam ||
Prākāra-saṁyutaṁ kṛitvā bāhye vābhyantare' pi vā ||

(*Suprabhedāgama*, XXXI, 128–31.)

Then follows the description of their faces and doors (*ibid.*, vv. 131–133, *see* under DVĀRA).

(6) ' (He) gave to the (image of) Piḷḷaiyār Gaṇapati in the surrounding hall (parivārālaya) of the temple of the Lord Śri Rājarājeśvara one brass spittoon (paḍikkam) which he had caused to be made of octagonal shape in the Ceylon fashion (Iraparisu) (and) which weighed palam.'—(Inscrip. of Rājarāja, no. 36, *H.S.I.I.*, Vol. II, p. 149 f.)

(7) ' This image was probably in the central shrine and was known as Ālaiyattu Piḷḷaiyār perhaps to distinguish him from the Parivārālaiyattu-Piḷḷaiyār set up apparently in the enclosing verandah of the temple.'—(*V. S. I. I.*, Vol. II, no. 85, p. 407, last para.)

' The gold presented until the twenty-ninth year (of the king's reign) by the Lord Śrī Rājarājadeva to (the image of) Piḷḷaiyār Gaṇapatiyār in the parivārālaya of the temple of the Lord Śri Rājarājeśvaramudaiyār . . . ' parivārālayah, i.e. the temple (ālaya) of the attendant deities (parivāra) which was probably in the enclosing hall.'—(*Ibid.*, no. 86 para. 1, p. 410, note 1.)

' One bell-dish . . . was presented . . . to (the shrine of) Piḷḷaiyār Gaṇapatiyār in parivārālaya of the temple of the Lord Śrī Rājarājeśvaramudaiyār . . . '—(*Ibid.*, no. 88, p. 412.)

(8) Parivāra-devatā-vistaramaṁ liṅga-pratishṭheyaṁ māḍisidam |

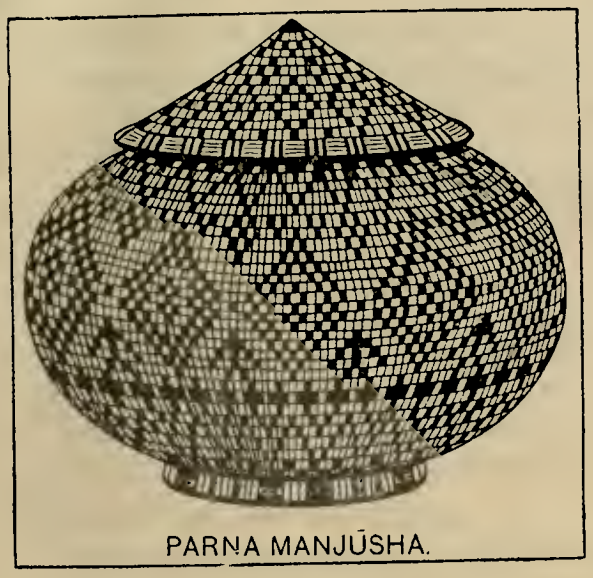
' He also set up a liṅga, with the associated gods, in Bandaṇika.'—(*Ep. Carnat.*, Vol. VII, Shikarpur Taluq, no. 242 ; Transl., p. 139, para. 6, last two lines ; Roman Text, p. 248, lines 1–2.)

PARI-VEṆA—Monk's cell, the private dwelling of a Bhikhu within the monastery.

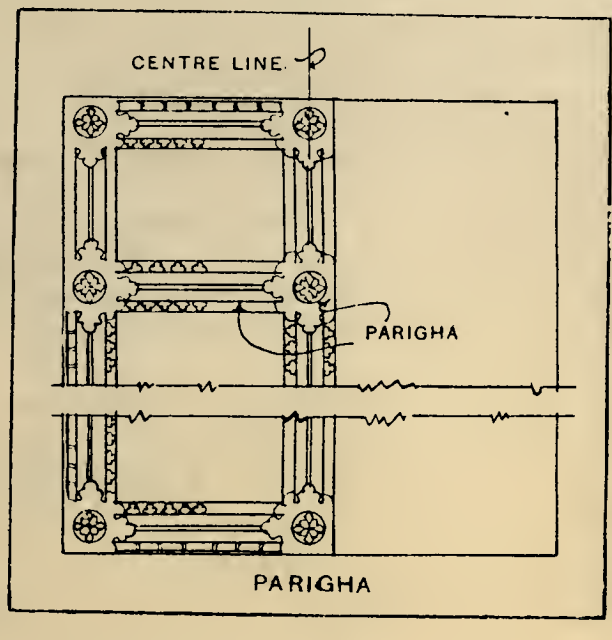
(W. Greiger : *Mahāvaṁśa*, p. 294.)

PARṆA-MAÑJŪSHĀ—A basket made of leaves, an article of furniture.

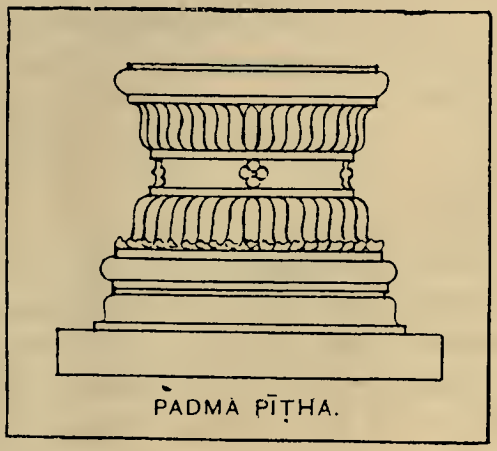
(*M.*, L, 47, 132–146 ; *see* details under BHŪSHAṆA.)



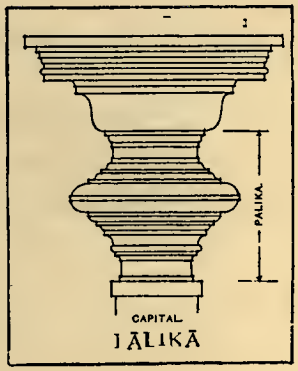
PARṆA MAÑJŪSHA.



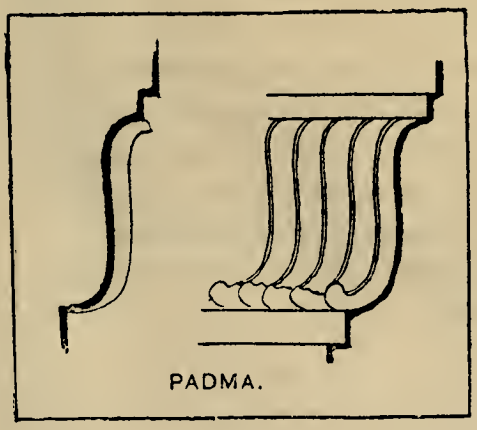
PARIGHA



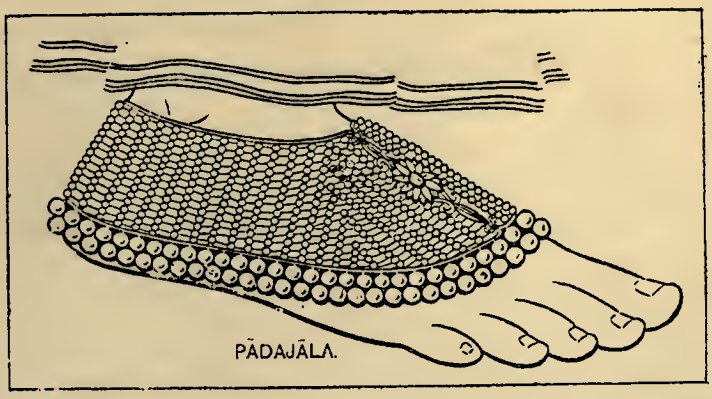
PADMA PĪṬHA.



JĀLIKĀ



PADMA.



PĀDAJĀLA.

PARYAṄKA—A couch, a bedstead.

Mānasāra, Chap. XLIV (named Śayana) :

Bedsteads are meant for the use of deities, the twice-born and all other people :

Devānāṁ cha dvi-jātīnāṁ varṇānāṁ śayanārthakam । (1)

They are of two kinds—the small (bāla-paryaṅka) and the large (paryaṅka) (lines 26, 28). The former is intended to be used by children and the latter by the grown-up, the one being distinguished from the other by its size alone.

The measurement and various parts of the two kinds of bedsteads are described separately (lines 3–79).

The materials of which bedsteads and seats (āsana) are generally constructed are various kinds of timber (line 74).

PARVATA—A class of buildings.

Kūṭa-śālā-samāyuktā punaḥ pañjara-nāsikā ।
Vedikā-jālakopetā parvatākṛitir uchyate ॥

(*Suprabhedāgama*, XXXI, 52.)

See details under PRĀSĀDA.

PALLAṄKA—A bedstead.

(*Chullavagga*, VI, 141 ; *Mahāvagga*, V, 10, 3.)

PAVANA—A type of chariot.

(*M.*, XLIII, 113 ; *see* under RATHA.)

PASTYA(Ā)—A dwelling house, a stall for horses (aśvapastyā), a home with its adjuncts and surroundings, a family settlement (harmya-pastyā), a noble man's abode with stables, etc., a group of houses, a river having groups of houses on its banks. (*R.-V.*, I, 25, 10, 40, 7, 164, 30 ; IV, 1, 11 ; VI, 49, 9 ; VII, 97, 5 ; VIII, 7, 291, 27, 5 ; IX, 65, 23 ; X, 46, 6, 96, 10, 11 ; IX, 86, 41 ; *A.-V.*, VI, 77, 1 ; XIX, 55, 1.)

PĀÑCHĀLA—A class of the twelve-storeyed buildings once prevailing in the ancient country of Pāñchāla (the Gangetic Doab).

For details, *see M.*, XXX, 8–10, under TALA and DRĀVIḌA.

PĀDA (*see* STAMBHA)—The foot, the lowest part, a quarter, the fourth part, the architrave, a pillar, a column.

(1) *M.*, XV (named Stambha), 1–448 :

Its synonyms are jaṅghā, charaṇa, stali, stambha, aṅghrika, sthāṇu sthūṇa, pāda, kampa, araṇi, bhāraka, and dhāraṇa (*ibid.*, 4–6).

(2) Atha vakshyāmi saṁkshepāt pāda-mānaṁ yathā-vidhi ।
Uttaropānayor madhya-gatam etat prakīrtitam ॥
(*Vāstu-vidyā*, ed. Gaṇapati Śastri, IX, 1.)

(3) The architrave of the entablature (*Kāmikāgama*, XXXV, 27 ; LIV, 47 ; *see* under PRASTARA).

(4) The comparative measures of pāda (pillar), adhishṭhāna (base) and prastara (entablature) :

Pādāyāmam adhishṭhānaṁ dvi-guṇaṁ sarva-saṁmatam ।
Pādārdhaṁ prastaraṁ proktaṁ karṇaṁ prastaravat samam ॥
(*Suprabhedāgama*, XXXI, 28.)

The five kinds of pillars and their characteristic features.
(*See Suprabhedāgama*, under STAMBHA.)

PĀDA-JĀLA—An ornament for the foot.
(*M.*, L, 33 ; LI, 59 ; LIV, 17, etc.; *see* BHŪSHAṆA.)

PĀDA-BANDHA—A class of bases.
(*M.*, XIV, 10–32 ; *see* the lists of mouldings under ADHISHṬHĀNA.)

A base in connexion with the bedstead :

Pāda-bandham adhishṭāhnaṁ sarva-jātyārhakaṁ bhavet ।
(*M.*, XLIV, 44.)

Cf. Suprabhedāgama (XXXI, 23–26) :

Adhishṭhānasya chotsedhaṁ chatur-viṁśati-bhājitam ।
Dvi-bāgā paṭṭikā proktā hy-upānaṁ chaika-bhāgikam ॥
Shaḍ-bhāgā jagatī proktā kumudaṁ pañcha-bhāgikam ।
Ekāṁśā paṭṭikā proktā grīvā chaiva tryaṁśakā ॥
Ekāṁśā paṭṭikā viddhi (ḥ) tr(i)yaṁśā chordhva-paṭṭikā ।
Mahā-paṭṭikā tr(i)yaṁśā ekaṁ vājanam uchyate ॥
Pāda-bandham iti khyātaṁ sarva-kāryeshu pūjitam ॥

PĀDA-BANDHAKA—A type of throne.
(*M.*, XLV, 15 ; *see* under SIṀHĀSANA.)

PĀDA-VEDĪ—The storeyed base of a Buddhist stūpa (*Mahāvaṁsa*, 35, 2), the balustrade, the railing.
(W. Greiger : *Mahāvaṁsa*, p. 297.)

PĀDĀṄGA—Literally the lowest member, hence, the architrave or the bottom portion of the entablature.
(*See Kāmikāgama*, LIV, 47, under PRASTARA.)

PĀDUKA—The plinth, the pedestal, the base, a moulding.

The plinth or the base (*M.*, XIV, 162 ; *see* the lists of mouldings under ADHISHṬHĀNA).

The pedestal (or base) of a column :

Tan-mūle chāsanaṁ kuryāt pādukaṁ vā sahāmbujam ।
Ekāṁśaṁ pādukaṁ kuryāt pañcha-bhāgaṁ tu saṁgraham ।

(*M.*, XV, 31, 177.)

A moulding at the bottom of the pedestal (*M.*, XIII, 43; *see* the lists of mouldings under UPAPĪṬHA).

PĀRĀVATA-NĪḌA—A nest for the pigeon, an article of furniture.

(*M.*, L, 52, description of its architectural details, 224–227.)

PĀRIYĀTRA—A class of pavilions.

(*M.*, XXXIV, 154 ; *see* under MAṆḌAPA.)

PĀRŚVA-PULI—An ornament, a part of the crown.

(*M.*, XLIX, 94.)

PĀRŚVA-PŪRITA—Same as karṇa-pūra or patra—ear-ring.

(*M.*, XLIX, 96, 106, 115, 117–119, 141 ; *cf.* L, 14–26, 302.)

PĀLIKĀ(-Ī)—A boundary, a margin, an edge, an ornament, a bridge-like moulding of the column.

Atha vakshye viśeshena kumbhālaṅkāram uchyate ।
Tan-mūle pālikotsedhe vibhajet tu shaḍ-aṁśakam ।

(*M.*, XV, 201–202 ; *see also* 220, 44, 33, 70, etc.; *cf.* XXXVII, 40.)

In connexion with the lips :

Tr(i)yaṁśārdhādharāyāṁ chārdha(ṁ)-chandravad-ākṛiti ।
Tri-vaktraṁ chottarā pāli chā(? sā) ntaraiś chaiva saṁyutam ।

(*M.*, XLV, 95–96 ; *see also* 89.)

PĀLIKĀ-STAMBHA—A kind of pillar.

(*M.*, XV, 39–73 ; *see* under STAMBHA.)

PĀŚUPATA—A kind of phallus.

(*M.*, LII, 2 ; LXVIII, 2 ; *see* under LIṄGA.)

PĀSHĀṆA-KŪRMA—A stone tortoise, a component part of a phallus.

(*M.*, LII, 178.)

PĀSHĀṆA-VEDI—The stone terrace on which the sacred trees usually stand, *cf.* *Mahāvaṁśa*, 36, 52.

PASHYA—Stone-bulwarks.

(*R.-V.* I, 56, 6.)

PIṆḌA—The testicle, its sculptural details.

(*M.*, LXV, 166.)

PIṆḌIKĀ (*see* PĪṬHA)—The pedestal of an image, a seat, the yoni part or the pedestal of the phallus.

(1) Dvāra-mānāshṭa-bhāgonā pratimā syāt sapiṇḍikā ।
Dvāu-bhāgau pratimā tatra tritīyāṁśā(ṣ) cha piṇḍikā ॥

'The idol along with the seat (i.e., pedestal) ought to have a height equal to that of the door, diminished by one-eighth, of which two-thirds are appropriated to the image, and one-third to the seat.'—(*Bṛihat-Saṁhitā*, LVI, 16 ; *also* LVIII, 3, 54 ; *J.R.A.S.*, N. S., Vol. VI, pp. 318, 323, 329.)

(2) Liṅga-pūjā-pramāṇena kartavyā pīthikā budhaiḥ ।
Piṇḍikārdhena bhāgaḥ syāt tan-mānena tu bhittayaḥ ॥

(*Matsya-Purāṇa*, Chap. CCLXIX, v. 8.)

(3) Pratimāyāḥ pramāṇena karttavyā piṇḍikā śubhā ।
Garbhas tu piṇḍikārdhena garbha-mānās tu bhittayaḥ ॥

(*Agni-Purāṇa*, Chap. XLII, v. 10.)

Arddha-bhāgena garbhaḥ syāt piṇḍikā pāda-vistarāt ।
Pañch-bhāgīkṛite kshetre'ntar-bhāge tu piṇḍikā ॥
Garbho bhāgena vistīrṇo bhāga-dvayena piṇḍikā ॥
Piṇḍikā koṇa-vistīrṇā madhyamāntā hy-udāhṛitā ॥
Ataḥ paraṁ pravakshyāmī pratimānāṁ tu piṇḍikāṁ ।
Dairghyeṇa pratimā tulyā tad-arddhena tu vistṛitā ॥

(*Ibid.*, Chap. CIV, vv. 1, 5, 24.)

Then follows a lengthy description (*see ibid.*, Chap. LV, v. 1, f. *also* Chap. CV, v. 30 ; Chap. LX, v. 1).

(4) Mānāshṭamena bhāgena pratimā syāt sapiṇḍikā ॥
Dvau bhāgau pratīmā tatra tritīyo bhāgaḥ piṇḍikā ॥
Tri-bhāgaiḥ piṇḍikā kāryā dvau bhāgau pratimā bhavet ॥

(*Bhavishya-Purāṇa*, Chap. CXXX, vv. 22, 32 : Chap. CXXXI, v. 6.)

The yoni part or the pedestal of the phallus :

(5) Liṅgaṁ cha piṇḍikāṁ chaiva prāsādaṁ gopuraṁ tathā ।

(*Suprabhedāgama*, XXX, 28.)

(6) Kuryād ekāṁ piṇḍikāṁ taṁ tu pārśve ।—(*M.*, LII, 152.)

PIṆḌI—A base for an image, the yoni part or pedestal of the phallus.

(Inscrip. from Northern Gujarat, no. VII, line 8, *Ep. Ind.*, Vol. II, p. 27, *see* details under PĪṬHA.)

PĪṬHA(-ṬHIKĀ)—Pīṭha is possibly corrupted from pi-sad to sit upon, hence means a stool, seat, chair, throne, pedestal, altar. A wooden seat (*Vāj. Sam.*, XXX, 21 : *Taitt. Brā.*, III, 4, 17, 1), low rectangular, plain or carved and sometimes with painted designs. The pedestal of an idol, the yoni part of the phallus, a pavement, chairs of various kinds (*Mahāvagga*, V, 10, 2 ; *see* BHADRĀPĪṬHA, ETAKA-PADAKA PĪṬHA). Fire-altars of the Vedic and Brāhmanic periods built on river banks, mistaken by Alexander for memorials, which Chandra Gupta Maurya utilized for sacrificial purposes. A site-plan of nine square plots. (*M.* VII, 4).

The well-known fifty-one Pīṭha-sthānas are the sacred spots where the limbs of Pārvatī, consort of Śiva, fell after she had been cut to pieces by the discuss of Vishṇu.

As the liṅga or phallus symbolically represents Śiva, so the pīṭha does his consort Pārvatī. The pīṭha forms the yoni or the lower part of the phallus.

Mānasāra (Chap. LIII, named PĪṬHA) :

> The pīṭha must match the phallus of which it forms the lower part (line 49). It should, therefore, be of as many kinds as there are phalli. But the mouldings of the pīṭha are described under four classes, technically called Bhadra-pīṭha, Śrībhadra, Śrīviśala, and Upapīṭha (lines 34, 36, 39, 41). The principal parts of the pīṭha are the nāla (canal), the jaladhārā (gutter), the ghṛita-vāri (water-pot), the nimna (drip), and the paṭṭikā (plate) (lines 22–27). The component mouldings are prathama or janman (base), padma (cyma), kshepaṇa (projection), kandhara (neck, dado), kampa (fillet), ūrdhvapadma (upper cyma), vājana (fillet), ghṛita-vāri (water-pot), or vṛitta-kumbha (circular pot) (lines 30–33).
>
> With regard to shape, the pīṭhas, like the phalli and all other architectural and sculptural structures, are divided into three types, the Nāgara, Drāviḍa, and Vesara (lines 46–47). The Nāgara pīṭhas are said to be square, the Drāviḍa pīṭhas octagonal, and the Vesara pīṭhas circular or round (lines 53–54).
>
> A site plan in which the whole area is divided into nine equal squares.—(*M.*, VII 4 ; *see* PADA-VINYĀSA.)

A pavement on the side of a road :

> Pechakaṁ vātha pīṭhaṁ vā rathyā yuktaṁ tu vinyaset ।
>
> (*M.*, IX, 423.)

In connexion with the palm of the hand :

Patra-tulyaṁ yugāṅgulyaṁ pīṭhe tuṅga(ṁ) dvayāṅgulaṁ ।

(*M.*, L, 197.)

The pedestal of an image :

Uttamaṁ lohajaṁ bimbaṁ pīthābhāsaṁ tu chottamaṁ ।

(*M.*, LI, 19 ; *see also* LVI, 16 ; LXII, 13, etc.)

The pedestal of the phallus (*M.*, LII, 245, 246, 247.)

(2) Etat sāmānyam uddishṭaṁ prāsādasya hi lakshaṇam ।
Liṅga-mānam ato vakshye pīṭho liṅga-samo bhavet ॥
Dvāravat pīṭha-madhye tu śeshaṁ sushirakaṁ bhavet ॥

(*Garuḍa-Purāṇa*, Chap. XLVII, vv. 11, 16.)

The pedestal or the yoni part of the liṅga :

(3) Liṅga-vishkambha-mānena bhaved dvi-tri-chatur-guṇaḥ ।
Tathā pañcha-guṇo vāpi pīṭha-vistāra ishyate ॥

(*Kāmikāgama*, L, 45 ; *see also* VV, 44, 47, 48, 50.)

The altar :

Brahma(-me) vā madhyame bhāge pīṭhaṁ parikalpayet ॥

(*Ibid.*, XXVIII, 18.)

Pañch-daśa-karāntaṁ tu kuryād āvṛita-maṇḍapam ॥
Maṇḍapena vinā vāpi tena mānena pīṭhikā ।
Vibhadrā vā sabhadrā vā kartavyā mālikā budhaiḥ ॥

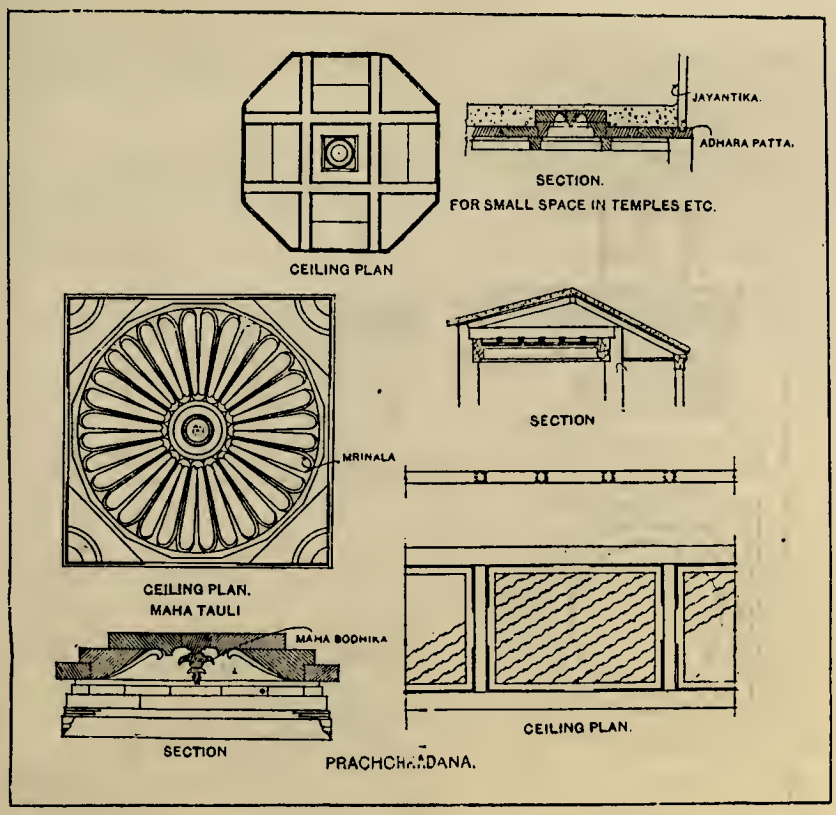
(*Ibid.*, XXXV, 99, 100.)

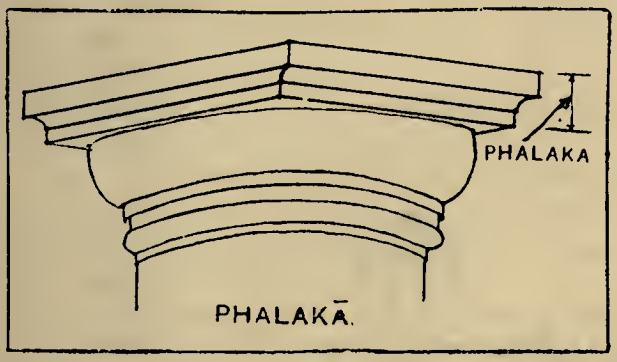
Here 'pīṭhikā' would indicate the projecting part of the basement, resembling the Buddhist railing round a tree, etc.

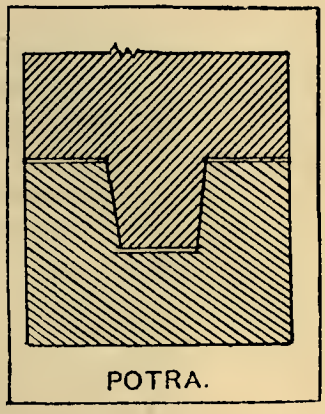
(4) Yāval liṅgasya vishkambhaṁ tri-guṇaṁ pīṭha-vistaram ॥
Pūjāṁśaṁ dvi-guṇaṁ pīṭhaṁ tri-guṇaṁ vā viśeshataḥ ॥
Pīṭhasya tri-guṇaṁ garbhaṁ ta(t)-tri-bhāgaika-bhittikam ।

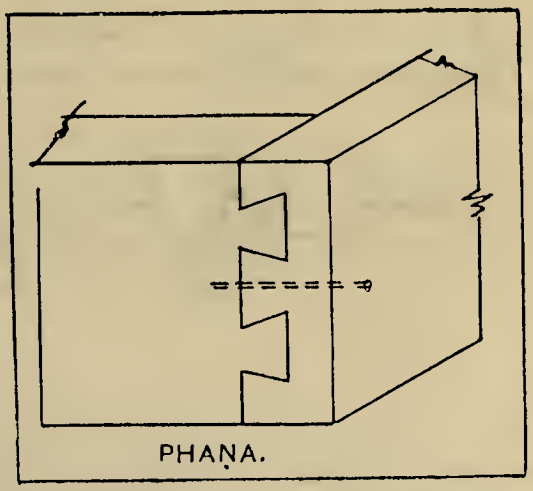
(*Suprabhedāgama*, XXXI, 9, 11, 12.)

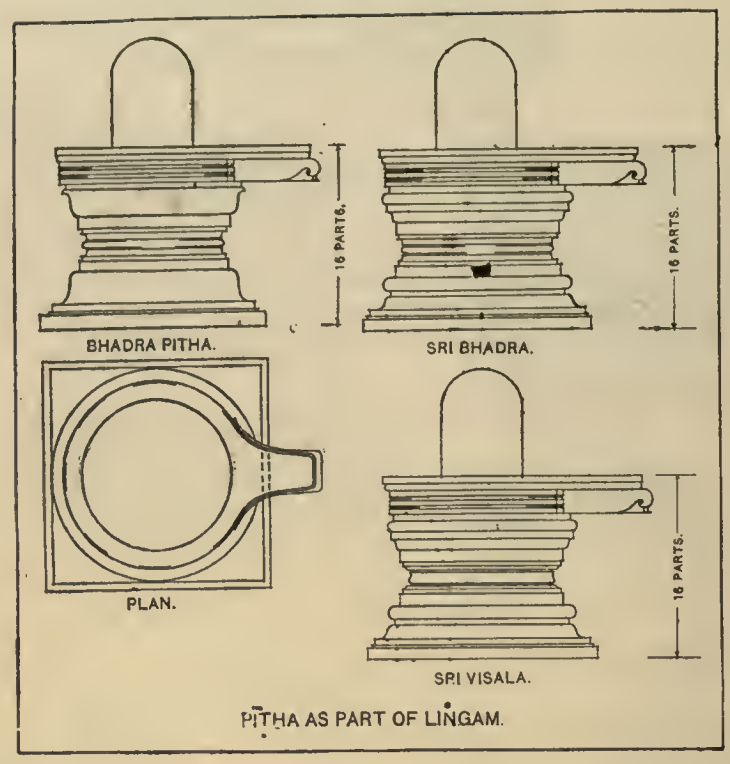
(5) Bhāga-dvayena pratimā tri-bhāgikṛitya tat punah ।
Pīṭhikā bhāgataḥ kāryā nātinīchā na chochchhritā ॥ (25)
Pīṭhikā lakshaṇaṁ vakshye yathāvad anupūrvaśaḥ ।
Pīṭhochchrāyaṁ yathāvach cha bhāgān shoḍaśa kārayet ॥ (1)
Bhūmāvekaḥ pravishṭaḥ syāch chaturbhir jagatī matā ।
Vṛitto bhāgas tathaikaḥ syād vṛitaḥ paṭala-bhāgataḥ ॥ (2)
Bhāgais tribhis tathā kaṇṭhaḥ kaṇṭha-paṭṭas tu bhāgataḥ ।
Bhāgābhyāsam ūrdhva-paṭṭaś cha śesha-bhāgena paṭṭikā ॥ (3)
Pravishṭaṁ bhāgam ekaikaṁ jagatīṁ yāvad eva tu ।
Nirgamaṁ tu punas tasya yāvad vai śesha-paṭṭikā ॥ (4)
Vāri-nirgamanārthaṁ tu tatra kāryaḥ praṇālakaḥ ।
Pīṭhikānāṁ tu sarvāsām etat sāmānya-lakshaṇam ॥ (6)


JAYANTIKA.
ADHARA PATTA.
SECTION.
FOR SMALL SPACE IN TEMPLES ETC.
CEILING PLAN
MRINALA
SECTION
CEILING PLAN.
MAHA TAULI
MAHA BODHIKA
SECTION
CEILING PLAN.
PRACHCHHADANA.

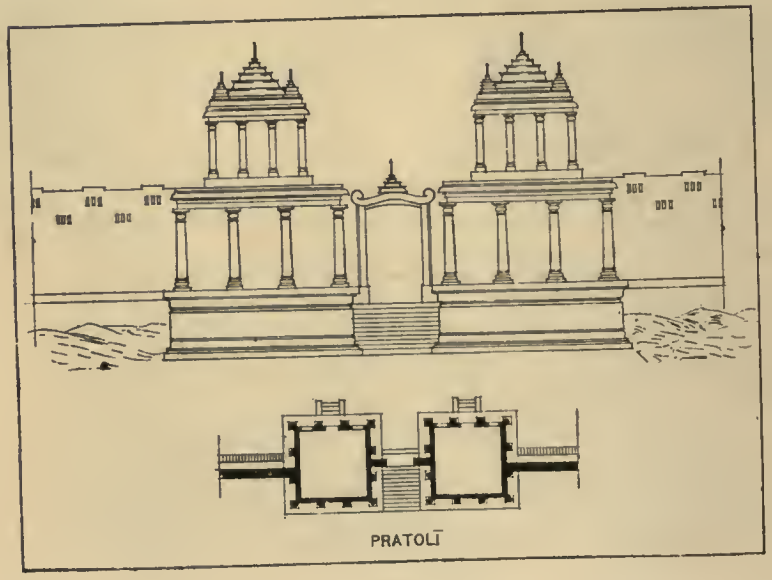

PHALAKA
PHALAKA.


POTRA.


PHANA.



PITHA AS PART OF LINGAM.



PRATOLI

Pūrṇa-chandrā vajrā cha padmā vārdha-śaśī tathā ।
Tri-koṇā daśamī tāśāṁ saṁsthānaṁ vā nibodhataḥ ॥ (7)
Devasya yajanārthaṁ tu pīṭhikā daśa kīrtitāḥ ॥ (19)
Liṅga-pūjā-pramāṇena kartavyā pīṭhikā budhaiḥ ॥ (8)

(*Matsya-Purāṇa*, Chap. CCLVIII, v. 25 ; Chap. CLXII, vv. 1–4, 6–7, 19 ; Chap. CCLXIX, v. 8.)

Vibhajya navadhā garbhaṁ madhye syāl liṅga-pīṭhikā ।

(*Ibid.*, Chap. CCLXIX, v. 15.)

(6) Pañcha-hastasya devasya eka-haśtā tu pīṭhikā ।
When the idol is 5 cubits high, its pedestal is one cubit.

(*Agni-Purāṇa*, Chap. XLII, v. 22.)

(7) ' One pedestal (pīṭha) on which the god and the goddess stood, (measuring) one muram and two viral in length, sixteen viral in breadth, and six viral in height. '—(Inscrip. of Rājarāja, no. 30, para. 7, *H.S.I.I.*, Vol II, p. 137.)

(8) ' One pedestal (surmounted by) a lotus (padma-pīṭha) on which this (image of Pañchadeha Śiva) stood (measuring) three viral and four torai in height, and fifteen viral and four torai square.'—(Inscrip. of Rājarāja, no. 30, on a pillar of the south enclosure, para. 4, *H.S.I.I.*, Vol. II, p. 138.)

(9) ' The hero Mādavan of Aṇḍa . . . got this pīḍam (pedestal) made.'—(*Ep. Carnat.*, Vol. X, Kolar Taluq, no. 109 *b* ; Transl., p. 40.)

' He had a temple and a bali-pīṭha built for the god Chandra-śekhara, the processional form of the god Śaṅkareśvara of Kergoḍi.'—(*Ibid.*, Vol. VII, Tiptur Taluq, no. 72 ; Transl., p. 57.)

(10) ' Whose daughter, Vināpati, having at this very place bestowed the entire gift of a Hiraṇya-garbha, and having made a pedestal (pīṭha) for the god with rubies.'—(Sanskrit and Old Kanarese inscrip., no. XCIV, line 7, *Ind. Ant.*, Vol. X, p. 103.)

(11) ' He made petition at the feet of Vidyāraṇya-Śrīpāda, representing that in Śṛiṅgapura, in (connexion with) the dharmma-pīṭha (religious throne,—siṁhāsane dharmamaye, in the original) established by Śaṅkarāchāryya(-chārya, in the original), there must be a maṭha and agrahāra.'

Of this dharma-pīṭha (siṁhāsana), Mr. Rice further says : ' The Śringeri dharma-pīṭha or religious throne was established as is well known (refers to the inscription quoted above) by Śaṅkarāchārya, the great Śaiva reformer of the eighth century. It is situated on the left bank of the Tuṅgā river, in a fertile tract near the Western Ghats. The celebrated scholar Mādhava or Vidyāraṇya (forest of learning), author of the *Veda-bhāshya*, who was instrumental in founding the Vijayanagar Empire in 1336, was the head of

the establishment at that time.' (Then is added that his brother was Sāyana, the well-known commentator of the *Ṛig-Veda*. The architectural characteristics are, however, not given.)—(*Ep. Carnat.*, Vol. VI, Śriṇgeri Jāgir, no. 11; Transl., p. 95, last para.; Roman Text, p. 195, lines 1, 12 f ; Introduct., p. 23, para. 5.)

(12) ' Possessor of thirty-two velāma, eighteen cities, sixty-four yoga-pīṭhas, and sixty-four ghaṭikā-sthānas.'—(*Ep. Carnat.*, Vol. VII, Shikārpur Taluq, no. 94; Transl., p. 61, line 7 f; Roman Text, p. 114, line 4 f.)

(13) Dvā-triṁśat tu velāvuramum ashṭādaśa-paṭṭaṇamuṁ bāsashṭi-yoga-piṭhamum aṛuvattanālku-ghaṭikā-sthānamuṁ ।

' (The poeple of) the thirty-two seaside towns, the 18 towns, 62 seats of contemplation, and 66 religious centres . . . (held a convocation.)'—(Old Kanarese inscrip. at Terdal, line 60, *Ind. Ant.*, Vol. XIV, pp. 19, 25.)

(14) ' Having thirty-two velāma, eighteen cities, sixty-four yoga-piṭhas, and āśramas at the four points of the compass.'—(*Ep. Carnat.*, Vol. VII, Shikarpur Taluq, no. 118; Transl., p. 86, last para., line 6.)

(15) ' Made a grant . . . of the Mallasamudra village . . . belonging to the Sādali throne (piṭhikā). '—(*Ep. Carnat.*, Vol. X, Sidla-ghatta Taluq, no. 94; Transl., p. 194, last para.)

(16) Pīṭhi—a pedestal (Raṅganāth inscrip. of Sundara-pandya, v. 19, *Ep. Ind.*, Vol. III, pp. 13, 16).

(17) Purāṇa-pīṭhe piṭhāṁtaraṁ sa chaturaṁ vidhivad vidhāya ।

(Chebrolu Inscrip. of Jaya, postscrip., lines 7-8, *Ep. Ind.*, Vol. V, pp. 115–151.)

(18) Pīṭhikā—a platform of stone (*see* Specimens of Jain Sculptures from Mathura, Plate III, *Ep. Ind.*, Vol. II, p. 320).

PṚITHIVĪ-DHARA—A type of oval building.

(1) *Agni-Purāṇa*—(Chap. CIV, vv. 19–20, *see* under PRĀSĀDA).

(2) *Garuḍa-Purāṇa*—(Chap. XLVII, vv. 29–30; *see* under PRĀSĀDA).

PUṆḌARĪKA—A class of the seven-storeyed buildings.

(*M.*, XXV, 3–23; *see* under PRĀSĀDA.)

PUR—A fortification, a small fortified place, a township (*see* NAGARA).

PURA—A big fortified city as in Tripura and Mahāpura described in the *Yajur-Veda* and *Brahmāṇḍa-Purāṇa* (*see* references under NAGARA) but apparently less pretentious than the capital cities (nagara), a castle, a fortress, a village, a fortified town, a city, a wall, a rampart, a house, an abode, a residence, the female apartments, a store-house, an upper storey.

A village (*M.*, IX, 215, etc.), a town (*M.*, X 39, etc.).

Grāmādīnāṁ nagarādīnaṁ pura-pattana-kharvaṭe ।
Koshṭha-kolādi-sarveshāṁ garbha-sthānam ihochyate ।

(*M.*, XII, 168–169.)

Kheṭānāṁ cha purāṇāṁ cha grāmāṇāṁ chaiva sarvaśaḥ ।
Trividhānāṁ cha durgāṇāṁ parvatodaka-dhanvinām ॥
Param ardhārdham āyāmaṁ prāg-udak-plavanaṁ puram ॥
Chatur-aśra-yutaṁ divyaṁ praśastaṁ taiḥ puraṁ kṛitam ॥

(*Brahmāṇḍa-Purāṇa*, Part 1, 2nd *anushaṁgapāda*, Chap. VII, vv. 105, 107, 108 ; *see also* v. 93.)

Pura-madhyaṁ samāśritya kuryād āyatanaṁ raveḥ ।

(*Bhavishya-Purāṇa*, Chap. CXXX, v. 40.)

(4) Karkkoṭādhīna-rakshaṁ svapuram idam atho nirmame Jāvṛishākhyam —' then built this town of his named Jāvṛisha, the protection of which was entrusted to Karkoṭa.'—(Buddhist Stone inscrip. from Sravasti, lines 4–5, *Ind. Ant.*, Vol. XVII, pp. 62, 63.)

(5) Jagapāla puraṁ jātaṁ kṛite deśe punar ṇṇave—in the newly re-created site, the town of Jagapāla grew up (i.e., was built).—(Rajim inscrp. of Rajapal, line 12, *Ind. Ant.*, Vol. XVII, p. 140.)

(6) ' With myriads of people, practices of virtue, agreeable occupations, streams of the (nine) sentiments, pleasure gardens, separated lovers, splendid tanks, full lotus beds, gilded boats for spring festivals, ghaṭīkā-sthānas (religious centres), the supports of dharmma and mines of enjoyment, moats which were as if the sea being overcome had returned here on account of the collection of beautiful women fair as the moon (grāma-nagara-kheḍa-kharvvaṇa-maḍamba-droṇa-mukha pura-pattana rājādhānī) on whatever side one looked in these nine forms did the Kunṭala-deśa shine. '—(*Ep. Carnat.*, Vol. VII, Shikārpur Taluq, no. 197; Transl., p. 124, para. 1, last seven lines ; Roman Text, p. 214, line 27 f.)

(7) ' The three puras belonging to the great royal city (? rājadhānī) Balligāve.'—(*Ep. Carnat.*, Vol. VII., Shikārpur Taluq, no. 99; Transl., p. 66-last two lines.)

PURATO-BHADRA (*see* MUKHA-BHADRA)—The front tabernacle, a porch, a portico, a vestibule.

Deva-śrī-śaśibhūshaṇasya (i.e., of Śiva) kṛitvā devālayaṁ kāritaṁ-yugmaṁ maṁdapa-śobhitaṁ cha purato-bhadraṁ pratolyā saha ।

' I have not been able to find purato-bhadra in the *Kośas* to which I have access, but sarvato-bhadra is described as a kind of house (?) with four doors facing the four quarters (here refers to Ram

Raz's *Essay on Architecture of the Hindus*, 1834, p. 43; here a *village* called sarvato-bhadra is described not a *house* of the same name). From this I infer that a purato-bhadra was a building with only one door in front.'—Mr. Hira Lal.

But there does not seem to be much doubt that purato-bhadra and mukha-bhadra are identical and that they are an essential part of the ancient Hindu buildings, resembling more or less the front tabernacle.—(Kanker inscrip. of Bhanudeva, v. 7, *Ep. Ind.*, Vol. IX, pp. 127, 125, and note 4.)

PURI(-I)—A temple, an adytum, a building, a town.

(The second Praśasti of Baijnath, v. 25, *Ep. Ind.*, Vol. I, pp. 117, 114; *see also* no. 32.)

PURUSHĀÑJALI—The palm of a man. It refers to the depth of foundations upon which buildings of one to twelve storeys are stated to be erected.

Khānayed bhūtalaṁ śreshṭhaṁ purushāñjali-mātrakam ।
Jalāntaṁ vā śilāntaṁ vā . . . ।—(*M.*, XVIII, 6–7.)

The depth is stated here to reach water or stone under ground. Hence the expression seems to imply a depth measured by the height of a man with uplifted arms.

The following passage seems to be a parallel instance:

Chihnam api chārdha-purushe maṇḍuka-pāṇḍuro'tha mṛit-pītaḥ ।
Puṭa-bhedakaś cha tasmin pāshāṇo bhavati toyam adhaḥ ॥

Commentary: purusha-śabdenordhñva-bāhuḥ purusho jñeyaḥ, sa cha vīṁśat-adhikaṁ aṅgula-śataṁ bhavati—by the word 'purusha' is to be understood the man with uplifted arms, that is, 120 aṅgulas (or 5 cubits).—(*Bṛihat-Saṁhitā*, LIV, 7, *J.R.A.S.*, N. S., Vol. VI, p. 301' note 1.)

PUSHKARA—A blue lotus, a part, a portion, the forepart of the nose (*M.*, LXV, 84), water, a cage, a type of building, a class of buildings (*Kāmikāgama*, XLV, 61, 63; *see* under MĀLIKĀ).

PUSHKARIṆI (*see* TAḌĀGA and VĀPĪ)—A tank, a lotus-pool.

Datia-putreṇa thai Noreṇa pukaraṇi karavīta savrasapaṇa puyae ।
'By the son of Dati, the Thera Nora, a tank was caused to be made for the worship of all snakes.'—(New Kharoṣhti inscrip. from Swat, *Ind. Ant.*, Vol. XXV, p. 141, and Vol. XXXVII, p. 66.)

PUSHKALA—A class of storeyed buildings, a tree, a type of pent-roof.

A class of the two-storeyed buildings (*M.*, xx, 94, 42–43; *see* under PRĀSĀDA).

A tree (*M.*, xv, 354, etc.).

A kind of pent-roof (*M.*, xviii, 188).

PUSHPAKA—A flower, the car of Kubera, a bracelet, a type of pavilion, a class of buildings.

A pavilion with sixty-four pillars (*Matsya-Purāṇa*, Chap. cclxx, v. 7; *see* under MAṆḌAPA).

A class of buildings, rectangular in plan and named (1) Ba(va) labhī (2) Gṛiharāja, (3) Śalāgṛiha or Śālāmandira, (4) Viśāla, (5) Sama, (6) Brahma-mandira or Brahma-bhuvana, (7) Prabhava, (8) Śivikā, and (9) Veśma:

(1) *Agni-Purāṇa* (Chap. civ, vv. 11, 16–17; *see* under PRĀSĀDA).

(2) *Garuḍa-Purāṇa* (Chap. xlvii, vv. 2–22, 26–27; *see* under PRĀSĀDA).

PUSHPA-PAṬṬA—A flower plate, a turban, a head-gear, a tiara, a diadem.

(*M.*, lxix, 16; *see* details under BHŪSHAṆA.)

PUSHPA-PUSHKALA—A class of bases.

(*M.*, xiv, 97–112; *see* the lists of mouldings under ADHISHṬHĀNA.)

PUSHPA-BANDHA—A type of window of flower-band design.

(*M.*, xxxiii, 584; *see* under VĀTĀYANA.)

PUSHPA-BANDHANA-MAṆḌAPA—A detached building where flowers are garlanded for the worship of the deity.

Pushpa-danta-pade chaiva pushpa-bandhana-maṇḍapam।

(*M.*, xxxii, 42.)

PUSHPA-BODHAKA—A type of capital.

(*M.*, xv, 155–168; *see* under STAMBHA.)

PUSHPA-BHADRA—A pavilion with sixty-two pillars.

(*Matsya-Purāṇā*, Chap. cclxx, v. 7; *see* MAṆḌAPA.)

PUSHPA-RATHA—A chariot.

(Abulala-perumal inscrip. of Champa, lines 3–4, *Ep. Ind.*, Vol. iii, p. 71.)

PUSHPA-VĀṬIKĀ (*see* VĀṬIKĀ)—A garden, a bower, an arbour.

Uttare saralais tālaiḥ śubhā syāt pushpa-vāṭikā।

(*Matsya-Purāṇa*, Chap. cclxx, v. 29.)

PUṀLIṄGA (*see* Saṁchita)—A class of buildings with the six main component parts (*see* under ŚHAḌ-VARGA) and with terraces, a masculine type of building, a division of the architectural and sculptural objects as distinguished from the faminine (strīliṅga) and neuter (napuṁsaka) types.

Alinda-sahitaṁ shaḍ-varga-sahitaṁ cha yad arpitam ।
Saṁchitaṁ proktaṁ puṁliṅgaṁ tad ghanī-kṛitam ॥
Devānām asurāṇāṁ cha siddha-vidyādhareshv-api ।
Raksha-gandharva-yakshāṇāṁ praśastānāṁ cha janmināṁ (bhogyam) ॥

(*Kāmikāgama*, XLV, 8, 9.)

See the *Mānasāra* and the *Āgamas* under PRĀSĀDA, and compare STRĪ-LIṄGA and NAPUṀSAKA.

PŪRAṆA-KAMBA—A vase, a moulding.

'The panel or flat part of the back wall of each recess between the projecting tower-like compartments, is ornamented by a vase or some very florid object called pūraṇa-kambam.'

(Gaṅgai-Koṇḍo Puram Temple, *Ind. Ant.*, Vol. IX, p. 118, c. 2, para 4.)

PŪRTA—A well, a pond, a step-well.

(1) Pūrtaṁ vāpī-kūpa-taḍākādikam—(the word) pūrta implies the step-well, well, and pond, etc.

(2) Vāpī-kūpa-taḍākādi-devatāyatanāni cha ।
Anna-pradānārāmāḥ pūrtam ity-abhidhīyate ॥

The step-well, well, pond, and the temple (and) the pleasure-house (alm-house, hotel) where food is given (gratis)—these are called the 'pūrta.'

(3) Vāpī-kūpa-taḍākādi-pūrtam āyatanāni cha ।
Svarga-sthitiṁ sadā kuryāt tadā tat pūrta-sajñitam ।

The step well, well, pond and temples are pūrta. It always ensures the residence in heaven (for the doer), it is for this reason designated as pūrta.

(Quotations from the Commentary, Kāśyapa, on the *Bṛihat-Saṁhitā*, LVI, 2; *J. R. A. S*, N. S., Vol. VI, pp. 316–37, note 1.)

(4) Vāpi-kūpa-taḍāgādi-devatāyatanāni cha ।
Anna-pradānārāmāḥ pūrtam āryāḥ prachakshate ॥

(*Ep. Ind.*, Vol. IV, p. 318, note 3.)

PṚISHṬHA-SŪTRA—The plumb-line drawn by the back-bone.

(*M.*, LXVII, 80; *see* under PRALAMBA.)

PECHAKA—An owl, the tip or root of an elephant's tail, a couch, a bed, a shelter on a street, a site plan of four squares.

(*M.* VII, 3.)

In connexion with streets in a village :

Pechakaṁ vātha pīṭhaṁ vā rathyā yuktaṁ tu vinyaset ।

(*M.*, IX, 423, etc.

PAIŚĀCHA (*see* PADA-VINYĀSA)—A site plan of four squares.

(*M.* VII, 3.)

POTA(-I)KĀ (POTTIKĀ)—A part of a column, the site of a house.

Tat-samotsedhaṁ potikālaṅkṛiti-kriyā ।—(*Kāmikāgama*, LIV, 11.)

Potikāntāvalambaṁ vā tulāntaritam antaram ।—(*Ibid.*, 23.)

Pottikā (*ibid.*, LV, 69 ; *see* under MAKARA-TORAṆA).

A part of the bottom of a column.—(*Suprabhedāgama*, XXXI, 60 ; *see* under STAMBHA.)

POTRA—A moulding, an architectural object resembling the snout of a hog or a ploughshare.

In connexion with joinery :

Karkaṭāṅghrivat kṛitvā potra-nāsāṅghriṁ veśayet ।

(*M.*, XVII, 143.)

PAUSHṬIKA (*see* UTSEDHA)—A height which is $1\frac{1}{4}$ of the breadth, a class of buildings.

See Mānasāra (XXXV, 22–26) and compare *Kāmikāgama* (L, 24, 28), under ADBHUTA.

A class of the two-storeyed buildings (*M.*, XX, 93, 19–25 ; *see* under PRĀSĀDA).

PRAKOSHṬHA(KA)—The forearm, a hall, a room near the gate, of a palace, a court, a quadrangle, a part of the door-frame.

Ekāṁśaṁ madhya-bhadraṁ tu madhye yuktyā prakoshṭhakam ।

(*M.*, XXVI, 108.)

The forearm :

Prakoshṭhaṁ shoḍaśāṁśaṁ syāt talam ashṭāṁśam āyatam ।

(*M.*, LVII, 26, etc.)

PRACHCHHĀDANA—A covering, a canopy, the roof, an entablature.

A synonym of the entablature (*M.*, XVI, 18 ; *see* under PRASTARA).

In connexion with the three-storeyed buildings :

Prachchhādanopari stambhaṁ karṇa-harmyādi-maṇḍitam ।

(*M.*, XXI, 9.)

The roof :

Prastarasyopari-deśe karṇa-harmyādi-maṇḍitam ।
Yuktyā prachchhādanaṁ kuryāt sudheshṭakādi-gulodakaiḥ ।
(*M.*, xxxi, 69, 72.)

Pādaṁ vāyate tauliṁ kuryād yuktyā vichakshaṇaḥ ।
Tad-ūrdhve jayantikaṁ kuryāt tat-tat-prachchhādanānvitam ।
(*M.*, xxxiii, 373-374.)

Prachchhādanāṅkaṇaṁ kuryān na prachchhādanaṁ eva cha ।
(*M.*, xxxv, 295.)

Prachchhādanaṁ yathā-harmye dvāraṁ kuryāt tathaiśake ।
(*M.*, xxxviii, 7.)

Prastarochcham iti proktaṁ prachchhādanam ihochyate ।
Prāsādādīni(-nāṁ) sarveshāṁ prachchhādanādi-lakshaṇam ।
Etat prachchhādanaṁ gehe proktaṁ mama munīśvaraiḥ ।
Anyat-vāstūni-(nāṁ) sarveshāṁ prachchhādanam ihochyate ।
(*M.*, xvi, 120-121, 143-144 ; the proposed description, *ibid.*, 121-142, 145-168, 170-204.)

The materials of which they are constructed :

Kevalaṁ cheshṭakā-harmye dāru-prachchhādanānvitam ।
Śilā-harmye śilā-tauliṁ kuryāt tat tad viśeshataḥ ।

From this passage especially, it apears that the term ' prachchhādana ' indicates the roof of a building.—(*Ibid.*, 133-134.)

PRAṆĀLA(KA)—The drip or channel-like part of the pedestal of the liṅga (phallus), a gutter, a canal, a patter, a bracket.

(1) Vāri-nirgamanārthaṁ tu tatra kāryaḥ praṇālakaḥ ।

Therein (in the pedestal) should be made the praṇāla (gutter) as an outlet for water.

(*Matsya-Purāṇa*, Chap. ccLxii, v. 6.)

Ardhāṅgula-bhruvo-rājī praṇāla-sadṛiśī samā ।
(*Ibid.*, Chap. ccLviii, v. 37.)

(2) A square or round platter or bracket to which a spout is attached for ornamental purposes :

Aiśānyāṁ praṇālaṁ syāt pūrvasyāṁ vā prakīrtitā ॥
(*Kāmikāgama*, Lv, 82.)

See Mānasāra, Lii, 298, etc.

PRAṆĀLA(-LIKĀ,-LĪ)—A canal, a spout, a conduit, a watercourse, a drain.

(1) Pituḥ puṇyābhivṛiddhaye kāritā sat-praṇālīyam . . . ।

' This conduit has been built . . . for the increase of his father's spiritual merit.'—(Inscrip. from Nepal, no. 8, Vibhuvarman's inscrip., line 2 f., *Ind. Ant.*, Vol. ix, p. 171, c. 2.)

(2) Kūgrāme praṇālikāyāś cha khaṇḍa-sphuṭita-samādhānārtham—'for repairing the spout of the water-course in Kūgrāma.'—(*Ibid.*, no. 11, line 15, p. 174.)

PRATIKA(-Ī)—A moulding of crescent shape, the frieze; for its synonyms, *see M.*, XVI, 42–44. It is shaped like a petal in two parts (*M.*, XVI, 45).

(1) A moulding of the base (*M.*, XIV, 39, 138, 148, etc.; *see* the lists of mouldings under ADHISHṬHĀNA).

A moulding of the column (*M.*, XV, 217; XXXIII, 225, etc.).

(2) Pratīṁ nivcśayet tasya tri-tri-bhāgaika-bhāgataḥ ||
Anyayoś chārdha-chandrābhā pratī kāryā dvijottamāḥ ||

(*Kāmikāgama*, LIV, 44, 46.)

PRATI-KRAMA—A class of bases comprising four types which differ from one another in height and in the addition or omission of some mouldings.

(*M.*, XIV, 44–64; *see* under ADHISHṬHĀNA.)

Vedikeyaṁ tu sāmānyā kuṭṭimānāṁ prakīrtitā |
Pratikramasya chotsedhe chatur-viṁśati vibhājite ||

(*Vāstu-vidyā*, ed. Gaṇapati Śastri, IX, 19.)

Pratikramaṁ viśeshena kartavyaṁ pāda-bandhavat ||

(*Suprabhedāgama*, XXXI, 26; *see* the details under PĀDA-BANDHA.)

PRATI-BANDHA—A moulding of the base.

(*M.*, XIV, 324; *see* the lists of mouldings under ADHISHṬHĀNA.)

PRATI-BHADRA—One of the three classes of the pedestals, the other two being Mañcha-bhadra and Vedi-bhadra: it has four types differing from one another in height and in the addition or omission of some mouldings.

(*M.*, XIII, 53–89; *see* the lists of mouldings under UPAPĪṬHA.)

PRATIMA—A moulding, an architectural object.

In connexion with foundations:

Brahma-garbham iti proktaṁ pratimaṁ tat sva-rūpakam |
Evaṁ tu pratimaṁ proktam etad garbhopari nyaset |

(*M.*, XII, 149, 166.)

A moulding of the base (*M.*, XIV, 61, 137, 279; *see* the lists of mouldings under ADHISHṬHĀNA).

PRATIMĀ—An image, an idol, a bust, a statue.

(1) *Mānasāra*, Chap. LXIV (named Pratimā) :

Description of the images of the sixteen attendant deities of the Vishṇu temple (lines 1–92).

Cf. Pratimāṁ lohajaṁ choktaṁ tathā ratnaṁ tu vinyaset ।

(*M.*, LXX, 100.)

Pratimādhikāra (*M.*. LXVII, colophon).

(2) An image or idol (*Bṛihat-Saṁhitā*, LVI, 16, *J.R.A.S.*, N. S., Vol. IV, p. 318).

(3) Eka-hastā dvi-hastā vā tri-hastā vā pramāṇataḥ ।
Tathā sarvā tri-hastā cha savituḥ pratimā śubhā ॥

(*Bhavishya-Purāṇa*, Chap. CXXXII, v. 1.)

(4) Athātaḥ saṁpravakshyāmi sakalānāṁ tu lakshaṇam ॥
Sarvāvayava-dṛiśyatvāt pratimā tv-iti chochyate ॥
Iśvarādi-chatur-mūrttiḥ paṭhyate sakalaṁ tv-iti ॥

(*Suprabhedāgama*, XXXIV, 1–2.)

(5) Aṅgushṭha-parvād ārabhya vitastir-yāvad eva tu ।
Gṛiheshu pratimā kāryā nādhikā śasyate budhaiḥ ॥
Āshoḍaśā tu prāsāde karttavyā nādhikā tataḥ ।
Madhyottama-kanishṭhā tu kāryā vittānusārataḥ ॥
Dvārochchhrāyasya yan-mānam ashṭadhā tat tu kārayet ।
Bhāgam ekaṁ tatas tyaktvā pariśishṭaṁ tu yad bhavet ॥
Bhāga-dvayena pratimā tri-bhāgīkṛitya tat punaḥ ।
Pīṭhikā bhāgataḥ kāryā nāti nīchā nachochchhritā ॥

(*Matsya-Purāṇa*, Chap. CCLVIII, vv. 22–25.)

(6) Vinirmmitā rājate Chaṁkirājena Supārśva-pratimā uttamā—' the excellent image of Supārśva made by Chaṁkirāja adorns there.'—(Honwad inscrip. of Somesvara I, line 32, *Ind. Ant.*, Vol. XIX, p. 273.)

(7) ' An image (pratimā) may be very lofty and yet have no beauty, or it may be lofty and of real beauty, but have no dignity; but height, true beauty and exceeding dignity being all united in him, how highly is he worthy of worship in the world, Gommaṭeśvara, the very form of Jina himself. Should Maya address himself to drawing a likeness, the chief of Nāka-loka (Indra) to look on it or the Lord of Serpents (Ādiśesha) to priase it, it is unequal; this being so, who else are able to draw the likeness, to look fully upon or praise the unequalled form of the southern Kukkuṭeśa with its wondrous beauty.'—(*Ep. Carnat.*, Vol. II, Vindhyagiri inscrip., no. 85; Transl., p. 154, line 13 f.; Roman Text, p. 67 f.)

(8) ' In the presence of these gods, setting up the stone images (śilā-pratimā) of the crowned queen Lakshmīvilāsa, the lawful queen Kṛishṇavilāsa, and

the lawful queen Rāmavilāsa, together with my own.'—(*Ep. Carnat.*, Vol. IV, Chāmarajnagar Taluq, no. 86 ; Transl., p. 11, para. 3 ; Roman Text, p. 18, para. 1, last three lines.)

(9) Vichitiye Jina-dāsiya pratima Bhagavata pitāmahasa pratima pratishthāpita ।—(Mathura Inscrip. no. 16, line 2 ; Bitha Inscrip. no. C, lines 1–3 ; Cunningham, *Arch. Surv. Reports*, Vol. III, pp. 34, 48.)

(10) ' In the highly celebrated Somanātha-pura he made a great temple setting up therein according to all the directions of the *Āgama* the various incarnations of Vishṇu,—and shone with the fame he had acquired, Somachamupati, the Gāyi-govaḷa. Under the profound name of Prasannachenna he set Keśava on the right-hand side, and the source of world's pleasure, his form Gopāla, the lord who fills the mind with joy, Janārdha, —these three forms, united among themselves, were the chief in the Vishṇu temple in that pura. A cause of all manner of festivity were all the various forms around the enclosure, as they were all exhibited in different ways : the Matsya and others, all the ten incarnations, Keśava and others, Saṅkarshaṇa and others, twelve in name, Nārāyaṇa and others to the number of thirty-four, including eighteen, Kṛishṇa and others ; Gaṇapa, Bhairava, Bhāskara, Vishvaksena, Durggi, and such gods numbering seventy-three adorned the Vishṇu temple in the middle of pura. And in the south-east of the pura Soma-daṇḍādhipa set up Bijjaleśvara, Perggaḍeśvara, Revaleśvara, and Bayiraleśvara, with Somanātha Śiva-liṅga in the middle, . . . And he set up Bhava named Nṛisiṁheśvara, Yoga-Nārāyaṇa and Lakshmī-Nṛisiṁha in the middle of the Kāverī at Somanāthapura.—(*Ep. Carnat.*, Vol. XI, Dāvanagere Taluq, no. 36 ; Transl., p. 46, para. 3, line 7 f. ; Roman Text, pp. 76, 77).

PRATIMĀ-MAṆḌAPA—A detached building used as a temple, a pavilion.

(*M.*, XXXIV, 55.)

PRATI-MUKHA—A moulding of the base.

(*M.*, XIV, 102 ; *see* the lists of mouldings under ADHISHṬHĀNA.)

PRATI-PAṬṬA (*see* PAṬṬA)—A moulding, a band, a plate, a slab, a tablet.

(*Vāstu-vidyā*, IX, 23–24 ; *see* under PAṬṬA.)

PRATI-RŪPA—A moulding of the entablature.

(*M.*, XVI, 45 ; *see* the lists of mouldings under PRASTARA.)

PRATI-VAKTRA—A moulding of the base.

(*M.*, XIV, 118 ; *see* the lists of mouldings under ADHISHṬHĀNA.)

PRATI-VĀJANA—A concave moulding resembling the cavetto.

See Fletcher (*Hist. Arch.*, p. 101).

It is 'the same thing in the pedestal to answer to the vājana : its form, though generally rectangular, is sometimes, when placed in cornices, found to be externally a little more inclined to one side than to the other, and in this situation it resembles the cavetto.'—(Rām Rāz, *Ess. Arch. Hind.*, p. 25.)

Āliṅgāntaraṁ chordhve prativājanam uchyate ।—(*M.* XLV, 111.)

A moulding of the pedestal (*M.*, XIII, 58, 93, 111, etc. ; *see* the lists of mouldings under UPAPĪṬHA.)

A moulding of the base (*M.*, XIV, 39, etc. ; *see* the lists of mouldings under ADHISHṬHĀNA.)

PRATIŚRAYA—Help, a shelter house for travellers, a dwelling house, a residence, a sacrificial hall, an assembly.

(1) Satra-prapā-pra(ti)śraya-vṛishotsargga-vāpī-kūpa-taḍarāma-devālayādi-karaṇopakaraṇārtham iha—'for the purpose of (supplying) requisite materials for preparing alms-house (feeding establishment), a place for distributing water gratis to travellers, a shelter-house for travellers, a vṛishotsargga (*see* below, *Ind. Ant.*, Vol. XII, p. 142), reservoirs, wells, tanks, orchards, temples, etc.'—(Cambay Plates of Govinda IV, line 58, *Ep. Ind.*, Vol. VII, pp. 41, 46, note 8.)

(2) Chatuś-śālāvasadha-pratiśraya-pradena ārāma-taḍāga-udapāna-kareṇa—'has given the shelter of quadrangular rest-houses, has made wells, tanks, and gardens.'—(Nasik Cave inscrip. no. 10, line 2, *Ep. Ind.*, Vol. VIII, pp. 78, 79.)

'But pratiśraya, as I have stated in a note (Nāsik inscr ption, the International Congress of the Orientalists held in London in 1874) is what is in these days called an anna-sattra, i.e. a house where travellers put up and are fed without charge.'—Dr. Bhankarkar, and compares :

(3) *Hemādri* (p. 152) : Pratiśrayaḥ pravāsināṁ āśrayaḥ, i.e., a shelter house for travellers.

(4) *Vahni-Purāṇa* (p. 763, quoted also by Dr. Hoernle) :

Pratiśrayaṁ suvistīrṇaṁ sad-annaṁ sujalānvitam ।
Dīna-nātha-janārthāya kārayitvā gṛihaṁ śubham ।
Nivedayet pathisthebhyaḥ śubha-dvāraṁ manoharam ॥

'Having caused to be constructed for poor and helpless persons a pratiśraya (in the shape of) a good house, very commodious (wide), having food and plentiful water, provided with a good door, and charming, he should dedicate it to travellers.'—(*Ind. Ant.*, Vol. XII, p. 142, c. 1-2.)

PRATISHṬHĀ—An establishment, a fixed abode.

(*A.-V.*, VI, 32, 3, *Śāṅkh. Āran.*, XII, 14.)

PRATĪ (*see* PRATI)—A moulding.

PRATOLĪ—A gate-way, sometimes provided with a flight of steps, a small turret, the main road of a town.

(1) Rathyā pratolī viśikhā syāch chayo vapram astriyām ।

(*Amarakōsha*, II, ii, 3.)

(2) Triṁśad-daṇḍāṁtaraṁ cha dvayor aṭṭālakayor-madhye saharmya-dvi-talāṁ dvy-ardhāyāmāṁ pratolīṁ kārayet ।

Aṭṭālaka-pratolī-madhye tri-dhānushkādhishṭhānaṁ sāpidhāna-chchhidra-phalaka-saṁhatam indra-kośaṁ kārayet ।

Prākāram ubhayato maṇḍalakam adhyardha-daṇḍaṁ kṛitvā pratolī-shaṭ-tulāntaraṁ dvāraṁ niveśayet ।

(*Kauṭilīya-Artha-śāstra*, Chap. XXIV, paras. 8, 9, 15, pp. 52, 53.)

(3) *Mahābhārata* (Cock) :

XIV, 25, 21 : Taṁ cha śāla-chayaṁ śrīmat saṁpratolī sughaṭṭitam ।

XII, 69, 55 : Parikhāś chaiva kauravya pratolīr nishkūṭāni cha ।

(4) *Rāmāyaṇa* (Cock) :

II, 80, 18 : Pratolīvara-śobhitāḥ . . . (niveśāḥ) ।

V, 3, 17 : (Laṅkām) . . . pāṇḍurābhiḥ pratolībhir uchchābhir abhisaṁvṛitām ।

VI, 75, 6 : Gopurāṭṭa-pratolīshu charyāsu vividhāsu cha ।

(5) *See* 'The Sanskrit Pratolī and its new Indian derivatives.'—(*J.R.A.S.*, Vol. XIX, July, 1906.)

(6) Kṛitvā . . . ābihrāmāṁ muni-vasatiṁ . . . .svargga-sopānarūpām kaubera-chchhanda-bimbāṁ sphaṭika-maṁḍalā-bhāsa-gaurāṁ pratolīm ।

'Having made a gateway, charming (and) . . . the abode of Saints, (and) having the form of a staircase leading to heaven (and) resembling a (pearl-)necklace of the kind called Kauberachchanda (and) white with the adiance of pieces of crystalline gems.'

'That the word (pratolī) has the meaning in the present inscription of a gateway with a flight of steps seems to be shown by the comparison of the pratolī with a svarga-sopāna or flight of steps, or ladder, leading to heaven, and by its being described as white with the radiance of pieces of crystalline gems (in the stones of which it was constructed).'—(Bilsad stone pillar inscrip. of Kumaragupta, line 10, *C. I. I.*, Vol. III, F. G. I., no. 10, pp. 44, 45, 43, and note 1.)

(7) Hammīra vīra kva sa tava mahimā nirdiśaṁti dhvajāgrair-divyākāra-pratolī-hṛidayami-bhuvo nirmitā Kilhaṇena ।
Āstāṁ tāvat pratolī tad-upavirachitaṁ koshṭhaka-dvaṁ-dvam- etat prochchair-ālāna-yugmaṁ Vijaya[vara]kareḥ śatrulakshmāś cha sadma ।

(Hansi stone inscrip. of Pṛithvīrāja, V. S. 1224, vv. 5, 6, *Ind. Ant.*, Vol. XLI, pp. 19, 17.)

(8) Asyām uttuṅga-śṛiṅga-sphuṭa-śaśī-kiraṇa-(svetābhāsa-sanāthaṁ-ramyārāma) pratolī-vividha-jana-pada-strī-vilāsābhirāmam ।

'In this (city of Benares there was) a place, renowned on earth (bathed in the white light) of the bright rays of the moon (as they fell on its) lofty turrets; charming with the gracefulness of the wives of the various inhabitants of the (beautiful and extensive, *lit.* whose extent was charming) streets.'—(Benares inscrip. of Pantha, v. 2, *Ep. Ind.*, Vol. IX, pp. 60, 61.)

(9) Deva-śrī-śaśi-bhūshaṇasya kṛitinā devālayaṁ kāritaṁ yugmaṁ maṁḍapa-śobhitaṁ cha purato-bhadraṁ pratolyā saha ।

'Caused to be built two temples of the god whose ornament is the moon (viz. Mahādeva), together with halls, a purato-bhadra with a gateway.'—(Kanker inscrip. of Bhanudeva, v. 7, *Ep. Ind.*, Vol. IX, pp. 127, 128, 125, note 3.)

PRATYAṄGA—A minor limb, a moulding of the entablature.

(*Kāmikāgama*, LIV, 2; *see* under PRASTARA.)

PRATYŪHA (*see* ŪHA)—*Lit.* an obstacle, hence any architectural moulding or member separating two others, a supporting member, a moulding, an architectural object.

PRATHAMĀSANA—The throne for the preliminary coronation.

Cf. Prathamābhisheka-yogyaṁ syāt prathamāsanam eva cha ।

(*M.*, XLV, 2-3.)

PRADAKSHIṆA—A surrounding terrace or verandah, a circumambulating path round a temple, a circular road round a village or town.

(1) Śikharārdhasya chārdhena vidheyā tu pradakshiṇā ।
Garbha-sūtra-dvayaṁ chāgre vistāro maṇḍalasya tu ॥

(*Matsya-Purāṇa*, Chap. CCLXIX, v. 4.)

(2) Pradakshiṇaṁ bahiḥ kuryāt prāsādādishu vā na vā ।

(*Agni-Purāṇa*, Chap. CIV, v. 9.)

(3) Śikharārddhasya chārddhena vidheyās tu pradakshiṇāḥ ।

(*Garuḍa-Purāṇa*, Chap. XLVII, v. 8.)

See Matsya-Purāṇa above : this line is identical, except that it is used in the plural number here.

(4) ' The procession-path round the cell—called Pradakshiṇa—as that round apse, remained for some centuries as a common but not a universal feature. The verandah disappeared. Round a windowless cell it was useless, and the pillared porches contained in themselves, all the elements of shelter or of the shadow that were required.'—(Fergusson : *Hist. of Ind. and East. Arch.*, p. 221.)

(5) ' In the pradakshiṇa or passage behind images, are other two gratings over shafts from the lower hall.'—(Ahmadabad Arch. Burgess : *Arch. Surv.*, New Imp. Series, Vol. xxxiii, p. 87.)

PRADAKSHIṆA-SOPĀNA—A surrounding flight of steps.

(*Kauṭilīya-Artha-śāstra* ; *see* under SOPĀNA.)

PRAPATHA—A broad path, long journey by a broad road, high roads for travellers, rest-houses thereupon (*R.-V.*, x, 17, 4, 6 ; 63, 16 ; *Kath. Sam.*, xxxvii, 14 ; *Ait. Brā.*, vii, 15). A prince is landed for his prapathas (*R.-V.*, viii, 1, 30).

PRAPĀ (PRAPAṄGA)—A shed on the roadside for accommodating travellers with water, a place where water is distributed, a cistern, a tank, a building.

(1) Kulluka (*M. W. Dict.*) : Pānīya-dāna-gṛiha—a house where water is given (gratis).

(2) *Amarakōsha* (ii, 5, 7) : Āveśanaṁ śilpi-śālā prapā pānīya-śālikā ।

(3) A synonym of harmya (edifice) (*M.*, ii, 7).

In connexion with the staircase :

Prapāṅge pramukhe bhadre sopānaṁ pūrva-pārśvayoḥ ।

(*M.*, xxx, 105.)

In connexion with maṇḍapas (pavilions) :

Bhakti-mānaṁ tathā bhitti-vistāraṁ chāpy-alindakam ।
Prapāṅga-maṇḍapākāraṁ pañcha-bhedaṁ kramochyate ।

(*M.*, xxxiv, 3-4 ; *see also* 15.)

Madhye prachchhādanaṁ kuryāt prapāṅgaṁ vādhikalpayet ।
Tasya madhye cha raṅge tu mauktikena prapānvitam ।
Maṇḍapāgre prapāṅgaṁ syāt . . . ।

(*Ibid.*, 201, 218, 222 ; *see also* 224-225.)

Prapā is shed as an alternative for pavilion.

Prapāṅga is shed with open yards.—(*M.*, xxxiv, 567-568.)

Maṇḍapasya bahir-deśe prapāṁ paritas tu kārayet ।—(*Ibid.*, 290.)

In connexion with madhya-raṅga (central quadrangle or courtyard) :

Devānāṁ cha nṛipāṇāṁ cha sthānakāsana-yogyakam ।
Mukta-prapāṅga-mānaṁ cha lakshaṇaṁ vakshyate'dhunā ।
Yad-ukta-madhya-raṅge tu chatus-triṁśad vibhājite ।
Ekaikaṁ-bhāga-hīnaṁ syāt prapā-vistāram ishyate ।
. . . prapā-tuṅgaṁ śivāṁśaṁ syāt ।

(*M.*, XLVII, 1-4, 9.)

In connexion with the pedestals of the images of the Triad :

Prapā cha toraṇaṁ vāpi kalpa-vṛikshaṁ cha saṁyutam ।

(*M.*, LI, 87.)

(4) Prāg-vaṁśayor anya-vaṁśaiś cha nālikera-dalādibhiḥ ।
Āchchhāditaḥ(-tā) prapā nāma prastaraṁ chātra maṇḍapaḥ ॥

(*Kāmikāgama*, L, 88.)

(5) Prapāyāś cha maṇḍapam—' hall for the supply of water.'

(Inscrip. of the Chandella Viravarman, v. 19, *Ep. Ind.*, Vol. I, pp. 328, 330.)

(6) Vāpi-kūpa-taḍāga-kuṭṭima-maṭha-prāsāda-satrālayān ।
Sauvarṇa-dhvaja-toraṇāpana-pura-grāma-prapā-maṁḍapān ।
Vyadhāpayad ayaṁ Chaulukya-chūḍāmaṇiḥ ।

Here ' Prapā ' (shed) does not, evidently, mean a tank, which idea is expressed by the words vāpi, kūpa, and taḍāga.—(Sridhara's Devapattana Praśasti, v. 10, *Ep. Ind.*, Vol. II, p. 440.)

(7) *See* Raṅganāth inscrip. of Sundarapandya (v. 15, *Ep. Ind.*, Vol. III, pp. 13, 16.)

(8) Satra-prapā-praśraya-vṛishotsargga-vāpī-kūpa-taḍārāma-devāla-yādi-karaṇopakaraṇārthaṁ cha ।

Prapā—(?) a place of distributing water gratis (D. R. Bhaṇḍarkar).—(Cambay Plates of Govinda IV, line 58, *Ep. Ind.*, Vol. VII, pp. 41, 46.)

(9) Nadīnāṁ ubhato tīraṁ sabhā prapā-kareṇa—' erected on both banks shelters for meeting and such for gratuitous distributing of water.'—(Nasik Cave inscrip. no. 10, line 2 f., *Ep. Ind.*, Vol. VIII, pp. 78, 79.)

(10) Aneka-devatāyatana-sabhā-prapārāmāvasatha-vihāra-kārayita—' who caused to be built many temples of the gods, halls, drinking-fountains, gardens, rest-houses, and (Buddhist) monasteries.'—(Palitana Plates of Simhaditya, line 12, *Ep. Ind.*, Vol. XI, pp. 18, 19, note 3.)

(11) Dakshiṇa-diśābhāge kārāpitā vāpī tathā prapeyaṁ cha—' in the southern part there has been made an irrigation well also a watering-trough.'

Tathā prapā-kshetraṁ dvitīyaṁ tathā grāme uttara-diśāyām—' in the northern part of the village there is given a second field, for the watering trough.'—(Grant of Bhimadeva II, Vikrama Samvat 1266, lines 26, 27, 31, 32, *Ind. Ant.*, Vol. XVIII, pp. 113, 115.)

(12) 'Āpāna cannot have here (Aśoka pillar-edict, VII, lines, 2–3) its usual meaning " tavern, liquor-shop." As professor Kern (*Der Buddhism*, Vol. II, p. 385) assumes, it must denote a watering station. Probably the huts on the roads are meant, where water is distributed to travellers and their beasts gratis or against payment. The usual Sanskrit name is prapā.' Dr. Bühler.—(*Ep. Ind.*, Vol. II, p. 274, i.)

PRABHAVA—A type of rectangular building.

(*Agni-Purāṇa*, Chap. CIV, vv. 16–17 ; *see* under PRĀSĀDA.)

PRABHĀÑJANA—A type of chariot.

(*M.*, XLIII, 112 ; *see* under RATHA.)

PRABHĀ—A canopy, a city.

Śailaṁ śobhita-śata-kumbha-vilasat kumbhaṁ mahā-maṇḍapaṁ prākāraṁ paramālikā-vilasitaṁ muktāmayīṁ cha prapā(-bhā)m ।

'A great mahā-maṇḍapa of stone, resplendent with pitchers (? domes) of shining gold, a surrounding wall, adorned with excellent buildings, and a canopy of pearls.' Dr. Hultzsch.—(Fourteen inscrip. at Tirukkovalur, no. K, Inscrip. of Rajendradeva, lines 1–2, *Ep. Ind.*, Vol. VII, pp. 145–46.)

PRAMĀṆA—The measurement of breadth.

(*M.*, LV, 3–6 ; *see* under MĀNA.)

Pramāṇaṁ dīrgham ity-uktaṁ mānonmāna-pramāṇataḥ ॥

(*Suprabhedāgama*, XXXIV, 36.)

PRALAMBA—The plumb-lines or the lines drawn through an image in order to find out the perpendicular and the horizontal measurement of the different parts of the body.

(1) *See Bimbamāna* (vv. 73–91, 92–122, 123–138) under TĀLAMĀNA.

(2) *Mānasāra* (Chap. LXVII, named PRALAMBA) :

The instrument by means of which the plumb-lines are drawn is called pralamba-phalakā. This is a square plank of four, three, two or one aṅgula in thickness with the sides equal to three-fourths or half of the length of the image (line 6). Another plank of the same size is made and used as the stool on which the image is placed. The other plank (pralamba-phalakā) is fixed to the crown of the head of the image. The planks are kept level to each other. Some holes are made in the upper plank of the pralamba-phalakā wherefrom are suspended some strings at the other end of which are attached small balls made of iron or stone (lines 7–16). The number of holes and the strings suspended through the planks, by which the plumb-lines are determined, varies from five to eleven, according to the different postures and poses of the image. The five principal plumb-lines consist of one

drawn from the centre of the upper plank corresponding to the crown of the head, and four on the four sides of the body (line 19). Two other lines drawn adjoining the right and left sides of the face make the number seven (line 20). Another two lines drawn on the right and left sides of the back of the head make the number nine (line 22); and two lines drawn from the two armpits make the total of lines eleven (line 28).

The line drawn from the crown of the head (śikhā-maṇi) passes by the middle of the front, root and paṭṭa (band) of the diadem (mauli), middle of the forehead, eyebrows, nose, chin, neck, chest (ḥridaya), navel, sex organ, root of the thighs, half way between the knees, nalakas (ankles), heels, soles (feet) and two largest toes (lines 32–40). The perpendicular and horizontal distances between the different parts of the body are described in detail (lines 41–78, 99–139). The variations of these measurements are considered with regard to postures (lines 1–96), namely, erect (sthānaka), sitting (āsana) and recumbent (śayana), and poses (lines 98–140), called ābhaṅga, sama-bhaṅga, ati-bhaṅga and tri-bhaṅga (*see* under BHAṄGA).

These plumb-lines are stated to be drawn only for the purpose of measuring :

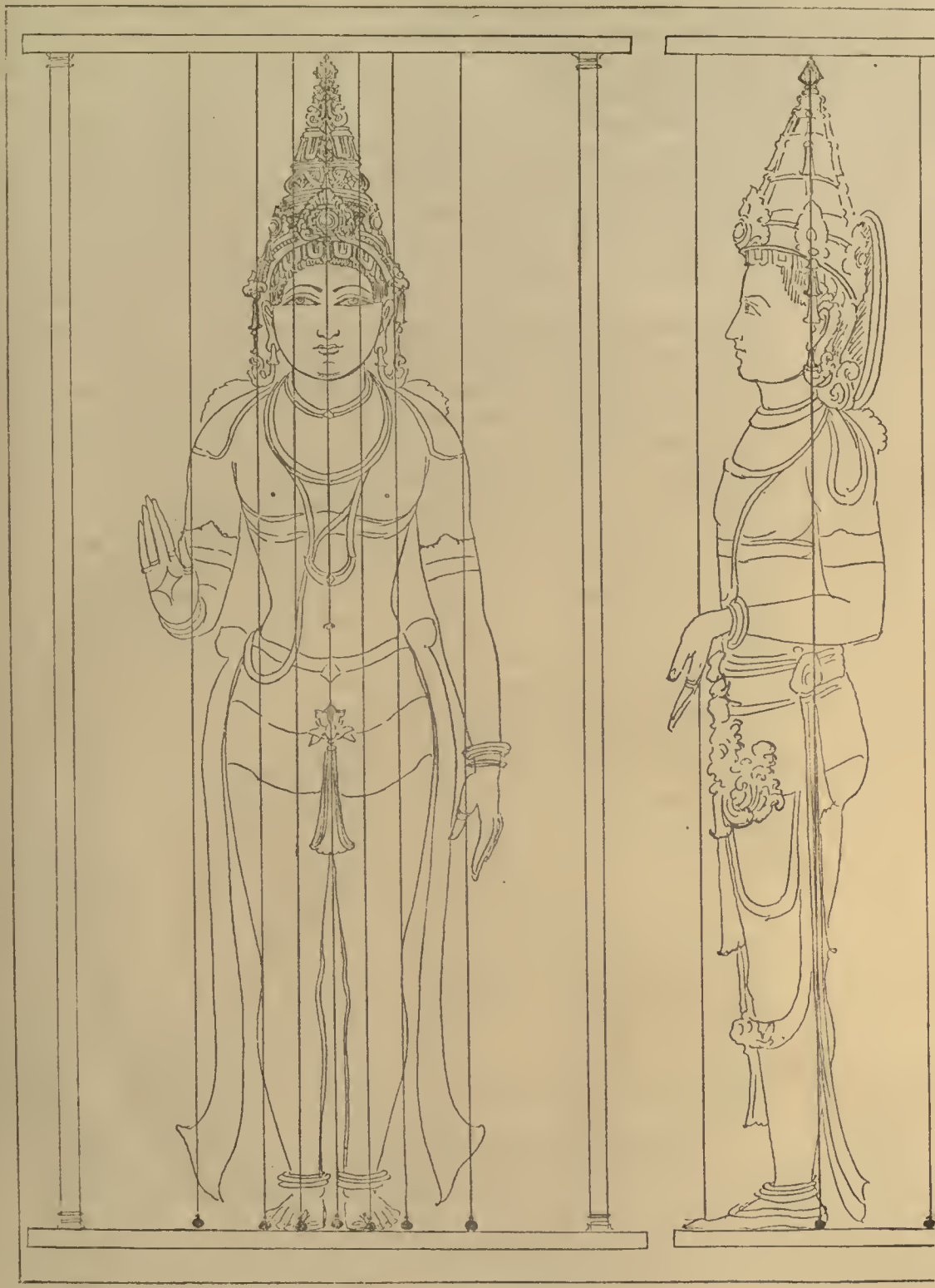
Evaṁ tu kārya-sūtraṁ syāt lambayet śilpavittamaḥ । (91)

The principles and mechanism of plumb-lines followed by the European architects are almost similar. The following quotations from Vitruvius and Gwilt would throw more light on the point :

(3) ' Agatharcus . . . was the first who contrived scenery, upon which he left a treatise. This led Democritus and Anaxagarus, who wrote thereon, to explain how the points of sight and distance ought to guide the lines, as in nature, to a centre, so that by means of pictorial deception, the real appearances of buildings appear on the scene, which, painted on a flat vertical surface, seem, nevertheless, to advance and recede.'—(*Vitruvius* Book VII, Introduction.)

' This (levelling) is performed either with the dioptra, the level (*libra acquaria*) or the chorobates. The latter instrument is, however, the beste inasmuch as the dioptra and level are often found to be incorrect. The chorobates is a rod about 20 feet in length, having two legs at its extremities of equal length and dimensions, and fastened to the ends of the rod at right angles with it ; between the rod the legs are cross-pieces fastened with tenons, whereon vertical lines are correctly marked, through which corresponding plumb-lines hang down from the rod. When the rod is set, these will coincide with the lines marked, and show that the instrument stands level.'—(*ibid.*, Book VIII, Chap. VI.)

(4) ' Plumb-rule, plumb-line, or plummet is an instrument used by masons, carpenters (sculptors), etc., to draw perpendiculars or verticals, for



PRALAMBA

ascertaining whether their work be upright, horizontal and so on. The instrument is little more than a piece of lead or plummet at the end of a string, sometimes descending along a wooden or metal ruler raised perpendicularly on another, and then it is called a level.'—(Gwilt, *Encycl.*, p. 1241.)

'The term, level, is used substantively to denote an instrument which shows the direction of a straight line parallel to the plane of the horizon. The plane of the sensible horizon is indicated in two ways : by the direction of the plummet or the plumb-line, to which it is perpendicular ; and by the surface of a fluid at rest. Accordingly, levels are formed either by means of the plumb-line, or by the agency of a fluid applied in some particular manner.'

'They all depend, however, upon the same principle, namely, the action of terrestrial gravity. The carpenter's level consists of a long rule, straight on its lower edge, about 10 or 12 feet in length, with an upright fixed to its upper edge, perpendicular to and in the middle of the length, having its sides in the same plane with those of the rule, and a straight line drawn on one of its sides perpendicular to the straight edge of the rule. This standing piece is generally mortised into the other, and finally braced on each side to secure it from accident, and has its upper end kerfed in three places, viz. through the perpendicular line, and on each side. The straight edge of the transverse piece has a hole, or notch, cut out on the other side equal on each side of the perpendicular line. A plummet is suspended by a string from the middle kerf, at the top of the standing piece, to vibrate freely in the hole or notch when hanging at full length. When the straight edge of the level is applied to two distant points, with its two sides placed vertically, if the plummet hangs freely, and the string coincides with the straight line on the standing piece, the two points are level. If not, suppose one of the points to be at the given height, the other must be lowered or raised, as the case may require, till the string is brought to a coincidence with the perpendicular line. By two points is meant two surfaces of contact, as two blocks of wood, or the upper edges of two distant beams.'

'The mason's level is formed of three pieces of wood, joined in the form of an isosceles triangle, having a plummet suspended from the vertex over a mark in the centre of the base.'—(Gwilt, *Encycl.*, p. 1217.)

PRALAMBA-PHALAKĀ (*see* under PRALAMBA)—The square plank through which the plumb-lines are drawn.

PRALĪNAKA—A class of buildings, a column with 32 rectangular sides, i.e., 32-sided shaft :

Dvā-triṁśat tu madhye Pralīnakaḥ (*Bṛihat-Saṁhitā*, LIII, 28).
Pralīnakam ataḥ śṛiṇu . . . ||

Śīrshakaṁ chatur-asraṁ tu pārśvayoḥ koshṭha-saṁyutaḥ ।
Pañjaraṁ nāsikā-yuktaṁ sopānaṁ pārśvayos tataḥ ॥
Pralīnaka iti proktā (-aḥ) . . . ।—(*Suprabhedāgama*, XXXI, 46, 47, 48.)

PRASTARA—The entablature. It comprises the parts of an order above a column. The assemblage is divided into three parts in the European architecture, namely the architrave which rests immediately on the column, the frieze next over the architrave being the middle member, and the cornice which is the uppermost part. These three parts are again variously subdivided. For its synonyms, *see M.*, XVI, 18–20, 42–44. It is also used as a synonym for plinth (*M.*, XXXIII, 220–227).

(1) The entablature is stated to be half of the column :

Prastaraṁ pāda-dī(-ai)rghyasya chārdha-mānena kārayet ।
Nyūnaṁ vāpi chādhikaṁ vāpi prastaraṁ kārayed budhaḥ ॥
Prastarokta-pramāṇaṁ tu sarvaṁ kaṇṭhe vidhīyate ॥

(*Kāmikāgama*, XXXV, 27, 28, 29.)

Ibid. Chap. LIV (named Prastara-vidhi) :

Three essential parts of the prastara (entablature) :

Hīnādhikaṁ tu chāṅgānāṁ prastarasya dvijottamāḥ ।
Pādāṅgānāṁ tathā kuryād galāṅge cha masūrake ॥ (47)

The pāda (foot, pedestal, base), gala (neck, middle part), and masūraka (lintel) would, apparently, correspond to the architrave, frieze, and cornice.

The mouldings of the prastara (entablalure) :

Uttaraṁ vājanaṁ chaiva mushṭi-bandhaṁ mṛiṇālikam ॥ (1)
Daṇḍikā valaya-kshudra-gopānāchchhādanaṁ cha ॥
Ālingāntaritā chaiva pratyaṅgaṁ vājanaṁ kramāt ॥ (2)

Their comparative measurement :

Tryaṁśaikāṁśaṁ-pañchaika-dvi-tri-bhāgaika-bhāgaiḥ ।
Tri-bhāgenaika-bhāgena upary-upari yojatet ॥ (3)

Three kinds of the prastara :

Etāni prastarāṅgāni tri-vidhaṁ chottaraṁ bhavet ।
Khaṇḍottaraṁ patra-bandhaṁ rūpottaram iha dvijāḥ ॥ (4)

Their description (vv. 5–6 ; *see* under those terms).

Further classification under SVASTIKA, VARDHAMĀNA, NANDYĀVARTA and SARVATOBHADRA (vv. 7–8).

The other details of the prastara (vv. 9–46).

Ibid., LV, 204 (synonyms) :

Prastaraṁ chaiva gopānaṁ kapotaṁ mañcham eva cha ।
Nīvram ity-evam ākhyātaṁ prastarasya dvijottamaḥ ।

Prastara (entablature) compared with base, pillar, tower (karṇa), finial or dome (śekhara) :

Pādāyāmam adhishṭhānaṁ dvi-guṇaṁ sarva-saṁmatam ।
Pādārdhaṁ prastaraṁ proktaṁ karṇaṁ prastaravat samam ॥
Prastara-dvi-guṇāyāmaṁ śekharaṁ hi tam uchyate ॥
Prastarād ūrdhva-bhāge tu karṇa-kūṭa-samāyutam ॥

(*Kāmikāgama.*, XXXI, 28-30.)

(2) Vedikāṁ prastara-samāṁ shaḍ-aṁśīkṛitya bhāgaśaḥ ।

(*Vāstu-vidyā*, ed. Gaṇapati Śāstri, IX, 23.)

Sva-sva-yonyā gṛihādīnāṁ kartavyā dvāra-yonayaḥ ।
Prastarottarayor madhyaṁ pañchadhā vibhajed budhaḥ ॥

(*Ibid.*, XIII, 26 ; *see also* 28.)

(3) . . . prastaraṁ cha tataḥ śṛiṇu ।
Prastarotsedha-mānaṁ tu pañcha-bhāga-vibhājitam ॥
Tri-bhāgaṁ uttarotsedhaṁ pādonottara-vājanam ।
Eka-bhāgaṁ tad-ūrdhve tu kartavyā padma-paṭṭikā ॥
Gaja-śreṇīṁ mṛiga-śreṇīṁ prastarānteshu yojayet ।
Evaṁ prastaram ākhyātaṁ talaṁ prati viśeshataḥ ॥

(*Suprabhedāgama*, XXXI, 72, 73, 74 ;
see also vv. 68–71, under TORAṆA.)

(4) *Mānasāra* (Chap. XVI, named PRASTARA) :

The height of the entablature as compared with that of the base is of six kinds (line 4). The former may be equal to the latter, or less by $\frac{1}{4}$, or greater by $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, or twice (lines 2-3) ; or in cubit measurement, these six kinds of height of the entablature begin with 7 cubits and end in $4\frac{1}{2}$ cubits, the decrement being by $\frac{1}{2}$ cubit (lines 5–6). These six kinds of entablatures are respectively employed in the houses of the gods, the Brahmans, the king or Kshattriyas, the crown princes, the Vaiśyas, and the Śūdras (lines 8–9).

The height of the entablature as compared with that of the column may be half, three-fourths, equal, or greater by $\frac{1}{4}$, $\frac{1}{2}$, and $\frac{3}{4}$ (lines 10–12). These six heights of entablature should discreetly be employed (line 13). Another set of six heights is also prescribed : the height of the pillar being divided into 8 parts, 7, 6, 5, 4, 3, 2, may be given to that of the entablature.

These entablatures are divided into eight or rather nine classes, the details of which are given below :

I. 31 parts (*ibid.*, lines 22–29) :

(1) Uttara (fillet)	..	..	..	$3\frac{1}{2}$
(2) vājana (fillet)	..	..	..	1
(3) valabhi(-bhī) (roof, capital)		..	..	4

(4) vājana (fillet)	..	..	..	1½
(5) uttara (fillet)	..	..	..	3
(6) vājana (fillet)	..	..	..	1
(7) kshudra-padma (small cyma)		..	..	1
(8) mahā-padma (large cyma)		..	..	3
(9) vājana (fillet)	..	..	..	1
(10) kapota (corona)	..	..	..	7
(11) āliṅga (fillet)	..	..	..	1
(12) antarita (fillet)	..	..	..	½
(13) prastara (ovolo)	..	..	..	2
(14) vājana (fillet)	..	..	..	1½

The projection of these mouldings are in most cases equal to them, but in some cases they may be ¾, ½, or ¼ of them.

II. 31 parts (*ibid.*, lines 59–71) :

(1) Uttara (fillet)	..	..	..	3
(2) kampa (fillet)	..	..	..	1
(3) valabhī (roof, capital)	..	..	..	1
(4) abja (cyma)	..	..	..	9
(5) vājana (fillet)	..	..	..	½
(6) mushṭi-bandha (band)	..	..	..	2½ (? 2)
(7) vājana (fillet)	..	..	..	½
(8) mṛiṇālikā (stalk)	..	..	..	2
(9) kandhara (dado)	..	..	..	1
(10) kshepaṇa (projection)	..	..	..	1
(11) padma (cyma)	..	..	..	1
(12) vājana (fillet)	..	..	..	1
(13) ādhāra (base)	..	..	..	1
(14) paṭṭa (band)	..	..	..	1
(15) vājana (fillet)	..	..	..	½
(16) mushṭi-bandha (band)	..	..	..	1½
(17) vājana (fillet)	..	..	..	1
(18) mahāvājana (large fillet)	..	..	..	2
(19) abja (cyma)	..	..	..	1

III. 36 parts (*ibid.*, lines 72–77) :

(1) Base, etc., should be as before ;				
(2) āliṅga (fillet)	..	..	..	2
(3) vājana (fillet)	..	..	..	1
(4) antarita (fillet)	..	..	..	3
(5) kampa (fillet)	..	..	..	1
(6) prati (-vājana) (cavetto)	..	..	..	2
(7) vājana (fillet)	..	..	..	1

THE ENTABLATURES

NOTE:-

1. THE TOTAL OF THE NUMBER OF PARTS FOR EACH TYPE VARIES FROM WHAT IS GIVEN IN THE TEXT
2. EXCEPTING THE TYPES SECOND AND THIRD IMAGES AND LEOGRAPHS DO NOT SUIT OTHERS

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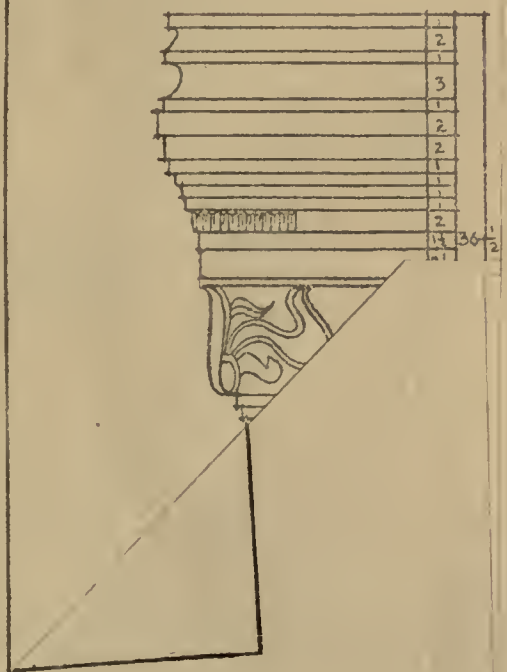


IV. 30 parts (*ibid.*, lines 78–88) :

(1) Uttara (fillet)	.. .. ..	3
(2) kampa (fillet)	.. .. ..	1
(3) valabhī (roof, capital)	.. .. ..	2
(4) vājana (fillet)	.. .. ..	1
(5) kapota (corona)	.. .. ..	5
(6) āliṅga (fillet)	.. .. ..	1
(7) antarita (fillet)	.. .. ..	2
(8) nimna (drip)	.. .. ..	½
(9) prati-vājana (cavetto)	.. .. ..	1½
(10) kandhara (dado)	.. .. ..	2
(11) vājana (fillet)	.. .. ..	1
(12) gṛiha (*?* grīva, dado)	.. .. ..	2
(13) vājana (fillet)	.. .. ..	1
(14) kapota (corona)	.. . ..	4
(15) ālinga (fillet)	.. .. ..	½
(16) antarita (fillet)	.. .. ..	1
(17) nimna (drip)	.. .. ..	½
(18) prastara (ovolo)	.. .. ..	1

V. 30 parts (*ibid.*, lines 89–99) :

(1) Mūla (base) as before ;
(2) gopāna (beam) as before ;
(3) vājana (fillet) 2
(4) kulikāṅghri (main pillar) (this part is furnished with nāṭaka) 5
(5) nāṭaka (theatre, quadrangular part) as before ;
(6) kapota (corona) as before ;
(7) kshudra-nāsī (small nose or vestibule) as before ;
the rest as before.

This entablature is decorated all over with crocodiles and bees (makara and bharamara, 94–95).

VI. 26 parts (*ibid.*, lines 100–109) :

(1) Uttara (fillet)	.. .. ..	3
(2) vājana (fillet)	.. .. ..	1
(3) padma (cyma)	.. .. ..	1
(4) vājana (fillet)	.. .. ..	1
(5) mushṭi-bandha (band)	.. .. ..	2
(6) vājana (fillet)	.. .. ..	1
(7) mṛiṇālikā (stalk)	.. .. ..	3
(8) vājana (fillet)	.. .. ..	1
(9) paṭṭikā (band)	.. .. ..	4

(10) vājana (fillet) 1
(11) kampa (fillet) .. .. .. ½
(12) padma (cyma) 1
(13) vājana (fillet) .. .. .. ½
(14) kapota (corona) 4
(15) āliṅga (fillet) .. .. .. ½
(16) vājana (fillet) .. .. .. ½
(17) antarita (fillet) 1
(18) prati-vājana (cavetto) 1

VII. 26 parts (*ibid.*, lines 110–116) :

(1) Nāṭaka (theatre, quadrangular part) as before ;
(2) upper columns as before ;
(3) lower columns as before.

Above these, all the members are same as before except that their projections are half or one-fourth of them, or their projections may be one, two, or three daṇḍas.

The images of Bhūtas (imps), Gaṇas (attendant demi-gods of Gaṇeśa), Yakskas (attendant demi-gods of Kubera), Vidyādharas (semi-divine beings), or of men are carved in the nāṭaka (crowning or capital) parts of temples. In the corresponding parts of the palaces, the images of Yakshas and Vidyādharas are carved ; in all other residential buildings, the human figures are made in the nāṭaka (crowning) parts. All the mushṭi-bandhas (fishbands) are made straight with the columns. The rest should be as before.

VIII. 26 parts (*ibid.*, lines 117 f.) :

(1) Kapota (corona) 8 more ; (2) nāṭaka (theatre, quadrangular part) 8 more ; the rest should be as before.

IX. 34 parts (*ibid.*, lines 117–119) :

Nāṭaka (theatre, quadrangular part) 8 parts more, and the rest should be as before.

With these may be compared the details of the early European entablature :

The height of the entablatures of the different orders :

(1) In the Tuscan order, ¼ of 7=1¾ diameters.
(2) In the Doric order, ¼ of 8=2 diameters.
(3) In the Ionic order, ¼ of 9=2¼ diameters.
(4) In the Corinthian order, ¼ of 10=2½ diameters.
(5) In the Composite order, ¼ of 11=2¾ diameters.

According to Vitruvius both to the Corinthian and the Composite orders ten parts are given.

Entablature is fourth part of the column. 'In general terms, its subdivisions of architrave, frieze, and cornice are obtained by dividing its height into ten equal parts, whereof three are given to architrave, three to frieze,

and four to cornice ; except in the Roman Doric order in which the whole height of the entablature is divided into eight parts of which two are given to the architrave, three to the frieze, and three to the cornice.'

' From these general proportions variations have been made by different masters, but not so great as to call for particular observation.'—(Gwilt, *Encycl. Arch.*, Art. 2542, 2543, 2549.)

I. Tuscan (Gwilt, *Encycl.*, Art. 2555) :

Entablature			Height in parts of a module	Projection from the axis of column in parts of a module
Cornice, 16 parts	Cymtinum and parts	(1) Quarter round	4	27½
		(2) Asragal ..	1	
		(3) Fillet ..	½	23½
	Bed moulding	(4) Congé or cavetto	1	22½
		(5) Corona ..	5	22½
		(6) Drip ..	1	21½
		(7) Sinking from corona or hollow	½	19½
		(8) Fillet	½	14
		(9) Ogee ..	4	13½
Frieze, 14 parts ..		(10) Frieze ..	14	9½
Architrave, 12 parts	Fillet ..	(11) Fillet or listel	2	11½
	Fascia ..	(12) Congé or small cavetto ..	2	9½
		(13) Fascia ..	8	9½

The height of the drip under the corona is taken on that member, and that of the hollow in the height of the fillet.

II. Doric (Gwilt, *Encycl.*, Art. 2564, 2562) :

Entablature		Height in parts of a module	Projection from the axis of column in parts of a module
Cornice, 18 parts	(1) Fillet of corona	1	34
	(2) Cavetto	3	31
	(3) Fillet	½	26
	(4) Cyma reversa	1½	30
	(5) Corona	4	28½
	(6) Drip	½	27½
	(7) Fillet	½	25
	(8) Gutta under the corona ..	½	24½
	(9) Dentil	3	15
	(10) Fillet	½	13
	(11) Cyma reversa	2	12½
	(12) Capital of triglyph ..	2	11

	Entablature	Height in parts of a module	Projection from the axis of column in parts of a module
Frieze, 18 parts	(13) Triglyph	18	10½
	(14) Metope	18	10
Architrave, 10 parts	(15) Listel	2	11½
	(16) Capital of guttae ..	½	11
	(17) Guttae	1½	11
	(18) Fascia	10	10
Mutular Doric :			
Cornice, 18 parts	(1) Fillet of the corona ..	1	34
	(2) Cyma	3	31
	(3) Fillet	½	31
	(4) Cyma reversa	1	30¾
	(5) Corona	3½	30
	(6) Cyma reversa.. ..	1	29½
	(7) Mutule	3	28½
	(8) Drip	½	28
	(9) Guttae of the mutule ..	½	26
	(10) Echinus or quater round ..	2	13½
	(11) Fillet	½	11½
	(12) Capital of triglyph ..	2	11
Frieze, 18 parts	(13) Triglyph	18	10½
	(14) Metope	18	10
Architrave, 12 parts	(15) Listel	2	12
	(16) Capital of the guttae ..	½	11½
	(17) Guttae	1½	11½
	(18) First fascia	6	10½
	(19) Second fascia	4	10
Grecian Doric (Parthenon) (*ibid.*, Art. 2579) :			
Cornices, 15·12 parts	(1) Fillet	0·60	22·10
	(2) Echinus	3·12	20·40
	(3) Fillet, with sunk cyma reversa	2·20	
	(4) Corona	4·88	18·98
	(5) Fillet	1·10	18·80
	(6) Capitals of mutules ..	1·10	
	(7) Mutules	0·32	18·66
	(8) Bead and capital of triglyph	2·00	11·46
Frieze, 14·88 parts	(9) Frieze (in metope) ..	15·12	
	(10) Triglyph	14·88	11·40

	Entablature	Height in parts of a module	Projection from the axis of column in parts of a module
Architrave, 17·10 parts	(11) Fillet	1·50	12·50
	(12) Cap of guttae ..	1·00	12·40
	(13) Guttae	0·20	
	(14) Architrave below guttae ..	14·40	11·20
III.	Ionic (Gwilt, *Encycl.*, Art. 2573, 2581) :		
Cornice, 34 parts	(1) Fillet of cyma ..	1½	46
	(2) Cyma recta	5	
	(3) Fillet	½	41
	(4) Cyma reversa ..	2	40½
	(5) Corona	6	38½
	(6) Fillet of the drip ..	1	29¼
	(7) Ovolo	4	28¼
	(8) Astragal	1	25
	(9) Fillet	½	24½
	(10) Dentel fillet	1½	21
	(11) Dentels	6	24
	(12) Fillet	1	20
	(13) Cyma reversa ..	4	19½
Frieze, 27 parts	(14) Frieze	27	15
Architrave, 22½ parts	(15) Listel	1½	20
	(16) Cyma reversa ..	3	19⅔
	(17) First fascia	7½	17
	(18) Second fascia ..	6	16
	(19) Third fascia	4½	15
	(20) Capital on the side ..	19	20
	(21) Capital on the coussinet or cushion	16	17½
	Grecian Ionic (in the temple on the Ilyssus) :		
Cornice, supposed height, 18·33 parts	(1) Fillet	restored	restored
	(2) Cyma recta	,,	,,
	(3) Fillet	,,	,,
	(4) Echinus	2·040	30·440
	(5) Corona	6·240	33·960
	(6) Drip	4·680	
	(7) Cyma reversa ..	2·700	20·520
	(8) Fillet	0·720	
	(9) Echinus	1·260	18·360

	Entablature	Height in parts of a module	Projection from the axis of column in parts of a module
Frieze, 29·901 parts	(10) Frieze	29·901	17·400
Architrave, 33·66 parts	(11) Fillet	1·920	30·520
	(12) Echinus	2·520	20·100
	(13) Bead	1·200	17·880
	(14) Fascia	27·600	17·160
	IV. Corinthian (Gwilt, *Encycl.*, Art. 2583) :		
Cornice, 38 parts	(1) Fillet of cornice ..	1	53
	(2) Cyma recta	5	53
	(3) Fillet	½	48
	(4) Cyma reversa	1½	45½
	(5) Corona	5	46
	(6) Cyma reversa	1½	45½
	(7) Modillion	6	44½
	(8) Fillet (remainder of modillion band)	½	28½
	(9) Ovolo	4	28
	(10) Bead	1	25
	(11) Fillet	½	24½
	(12) Dentils	6	24
	(13) Fillet	½	20
	(14) Hollow or congé ..	3	19⅔
Frieze, 1 mod., 7½ parts	(15) Frieze		15
Architrave, 27 parts	(16) Fillet	1	20
	(17) Cyma reversa ..	4	19⅔
	(18) Bead	1	17
	(19) First fascia	7	16½
	(20) Cyma reversa ..	2	16⅓
	(21) Second fascia	6	15½
	(22) Bead	1	15⅓
	(23) Third fascia	5	15
	V. Composite (Gwilt., *Encycl.*, 2591) :		
Cornice, 36 parts	(1) Fillet of cornice ..	1½	51
	(2) Cyma recta	5	51
	(3) Fillet	1	46

	Entablature	Height in parts of a module	Projection from the axis of column in parts of a module
Cornice, 36 parts	(4) Cyma reversa	2	$45\frac{1}{2}$
	(5) Bead	1	$43\frac{3}{4}$
	(6) Corona	5	43
	(7) Cyma under corona ..	$1\frac{1}{2}$	41
	(8) Fillet	1	33
	(9) Cyma reversa	4	$33\frac{1}{2}$
	(10) Fillet of the dentils ..	$\frac{1}{2}$	28
	(11) Dentils	$7\frac{1}{2}$	29
	(12) Fillet	1	23
	(13) Ovolo	5	22
Frieze, 27 parts	(14) Bead	1	17
	(15) Fillet	$\frac{1}{2}$	$16\frac{1}{4}$
	(16) Congé	$\frac{3}{4}$	15
	(17) Upright face	$17\frac{1}{4}$	15
	(18) Apophyge	7	22
Architrave, 27 parts	(19) Fillet	1	22
	(20) Cavetto	2	$20\frac{1}{2}$
	(21) Ovolo	3	20
	(22) Bead	1	$17\frac{3}{4}$
	(23) First fascia	10	17
	(24) Cyma reversa ..	2	$16\frac{2}{3}$
	(25) Second fascia	8	15

From the details given above it would be clear that both the Indian and European entablatures have much similarity in their composition and relative proportion. In the words of Rām Rāz, 'the massiveness of the Indian entablature offers a striking contrast to the lightness of the Grecian; but the richness of the former may be said to be unrivalled.'—(*Ess. Arch. of Hind.*, p. 40, also *see* Plate XIX, figs. 1–4.)

PRASTIRYA—Same as PRASTARA or entablature.

(*M.*, XVI, 184, 186.)

PRAVEŚA—The front door, the gate, the entrance.

Praveśa-nirgama-sthāne dvārair api samanvitam।

(*M.*, X, 107; *see also* XXXIII, 536.)

PRĀKĀRA—A wall, an enclosure, a fence, a rampart, a surrounding wall elevated on a mound of earth. In the *Śāṅkhyāyana Śrauta-sūtra* (XVI, 18, 14, quoted below) it denotes a walled mound supporting a raised platform (prāsāda) for spectators. But in the *Mānasāra*

it is used in a slightly different sense and implies the fourth of the five courts into which the compound of a house is divided.

(1) *Mānasāra* (Chap. xxxi, named Prākarā, 1–134) :

The uses of the prākāras :

They are built for bala (strength), parivāra (attendant deity), śobhā (beauty), and rakshaṇa (defence) :

Balārthaṁ parivārārthaṁ śobhārthaṁ rakshaṇārthakam ।
Pañcha-prākāra-harmyāṇām adhunā vakshyate kramāt ।

The whole compound of a house or temple is divided into five courts. The first one is called the antar-maṇḍala or the innermost court (line 11). The second is known as antar-nihāra and the third as madhyama-hārā (line 12). The fourth court is technically named prākāra (line 12). The fifth and last one is known as the mahā-maryādā or the extreme boundary where the large gate-houses (gopuras) are constructed (line 14). As the name of the chapter (Prākāra-lakshaṇa, description of Prākāra) indicates, the greater part of it describes only the fourth court (lines 15–102). Prākāras are also divided into the Jāti, Chhanda, Vikalpa (Ābhāsa) and Kāmya classes (lines 3–5). Under each class a number of buildings (śālās) are exhaustively described (lines 6–86).

A further classification (Saṁkīrṇa, etc.) is made with regard to materials of which these prākāra-buildings are made (line 103). The materials are same as in other cases, namely stone, brick and wood (line 102). The gopura or gate-house of the first court (antar-maṇḍala) is technically called dvāra-śobhā or beauty of the gate ; and those of the second, third fourth and fifth courts are called respectively dvāra-śāla, dvāra-prāsāda, dvāra-harmya, and mahā-gopura (*ibid.*, xxxiii, 9).

(2) *Suprabhedāgama* (Chap. xxxi, 115–128) :

Five courts or enclosure buildings :

Prākārāṇāṁ paritaṁ kuryāt prāsādasya pramāṇataḥ ।
Bhūmau vinyasya vistāraṁ prāsādasya su-niśchitam ॥
Prāsādasya tu vistāraṁ tasya daṇḍam ihochyate ।
Daṇḍāt tena kṛitaṁ yatra tv-antarmala-samaiva hi ॥
Eka-daṇḍāntar-bhārā tu madhya-bhārā dvi-daṇḍataḥ ।
Chatur-daṇḍa-pramāṇena kṛitvā maryyādi-bhittikam ॥
Mahā-maryyādi-bhittiḥ syāt sapta-daṇḍa-pramāṇataḥ ।
Pṛishṭhe chaivāgrato' py-ardhaṁ dvi-guṇaṁ tri-guṇaṁ tu vā ॥
Chatur-guṇaṁ mukhāyāmaṁ prākārāṇāṁ viśeshataḥ ।
Kapotāntaṁ samutsedhaṁ hasta-vistāra-bhittikam ॥
Kūṭa-śālā-yutaṁ vāpi kūṭa-śālāntam eva cha ।
Prākāreṇa samāyuktaṁ gopurasya vidhīyate ॥

Maṇḍale dvārake vātha dvāra-śālāṁ tu bhārake ।
Prāsādaṁ madhya-bhārāyāṁ maryyādau harmyam eva cha ॥
Gopuraṁ tu mahā-madhye evaṁ pañcha-vidhi smṛitam ।
Chatur-dikshu cha saṁyojyāḥ prākārāṇāṁ pṛithak pṛithak ॥
Kechid vai mālikākārā kechid vai gopurākṛitiḥ ।

Cf. The measurement of the five gate-houses (gopuras) of the five prākāras:

Vistāraṁ dvāra-śobhāyā dvi-tri-pañcha-karaṁ bhavet ॥
Shaṭ-saptāshṭa-nava-karair dvāra-śālā prakīrttitā ।
Ekā-daśa-trayo-daśa-hastaṁ (dvāra)-prāsāda-vistṛitam ॥
Chatur-daśa-pañcha-daśa-dvāra-harmyam iti smṛitam ।
Eka-viṁśa trayo-viṁśa dvāra-gopuram uchyate ॥

Their height as compared with length and breadth :

Vistāra-dvi-guṇāyāmam āyāma-dvi-guṇochchhrayam ।
Bhaumordhvottara-sīmāntaṁ dvārasyochchhraya-lakshaṇam ॥
Tad-ardhaṁ vistaraṁ proktaṁ(m) alaṁkāraṁ vimānavat ।
Prākāra-bhittim āśritya kuryād āvṛita-maṇḍapam ॥
Tad-bāhye'bhyantare vāpi mālikā-maṇḍdapaṁ hi vā ।
Pañcha-prākāram evaṁ syāt privārālayaṁ śṛiṇu ॥

Then follows the description of the temples of the attendant deities (v. 129 f.). These buildings are built in the five prākāras (*see* under PARIVĀRĀLAYA).

(3) *Śāṅkhyāyana-Śrauta-sūtra* (XVI, 18, 13, 14, *Bibliotheca Indica*, Vol. I, p. 210) :

Saṁsthite madhyame'hany-āhavanīyam abhito dikshu prāsādān viminvanti ॥ (13)

Tān uparishṭāt saṁvyādhaiḥ prākāraiḥ parighnanti ॥ (14)

(4) *Matsya-Purāṇa* (Chap. CCLXIX, v. 24) :

Prāg-grīvaḥ pañcha-bhāgena nishkās(ś)as tasya chochyate ।
Kārayet sushiraṁ tadvat prākārasya tri-bhāgataḥ ॥

(5) *Agni-Purāṇa* (Chap. XLII, 812) :

Tathā prākāra-vinyāse yajed dvā-triṁśad antagān ॥
Prāsādasya chaturthāṁśaiḥ prākārasyochchhrayo bhavet ॥

Ibid., Chap. CVI, 1–2 :

Nagarādika-vāstuṁ cha vakshye rājyādi-vṛiddhaye ।
Yojana-yojanārddhaṁ vā tad-arthaṁ sthānam āśrayet ॥
Abhyarchya vāstu-nagaraṁ prākārādyaṁ tu kārayet ॥

In this instance ' prākāra ' indicates the whole city wall.

(6) *Garuḍa-Purāṇa* (Chap. XLVI, 19) :

Prākāraṁ tad-bahir dadyāt pañcha-hasta-pramāṇataḥ ।

(7) *Brahmāṇḍa-Purāṇa* (Part I, 2nd Anushaṁga-pāda, Chap. VII, 103) :

Sotsedha-raṁdra-prākāraṁ sarvataḥ khātakāvṛitam ।

(8) *Kauṭilīya-Artha-śāstra* (Chap. XXIV, pp. 52, 53, 54) :

Vaprasyopari prākāraṁ vishkambha-dvi-guṇotsedham aishṭakaṁ-dvā-daśa-hastād ūrdhvam ojaṁ yugmaṁ vā āchatur-viṁśati hastād iti kārayet ।

Antareshu dvi-hasta-vishkambhaṁ pārśve chatur-guṇāyāmam anuprākāram ashṭa-hastāyataṁ deva-pathaṁ kārayet ।

Prākāram ubhayato maṇḍalakam adhyardha-daṇḍaṁ kṛitvā pratolishaṭ-lulāntaraṁ dvāraṁ niveśayet ।

Prākāra-samaṁ mukham avasthāpya tri-bhāga-godhā mukhaṁ gopuraṁ kārayet ।

Prākāra-madhye kṛitvā vāpīṁ pushkariṇīm . . .

(9) *Rāmāyaṇa* (Cock) :

VI. 3, 14 : Sauvarṇaś cha mahāṁs tasyāḥ prākāro dushpradharshaṇaḥ ।
Maṇi-vidruma-vaidūrya-muktā-virachitāntaraḥ ॥

VII. 5, 29 : Dṛiḍha-prākāra-parikhāṁ . . . laṁkām ।

V. 55, 32 : Laṁkā aṭṭa-prākāra-toraṇā ।

V. 3, 6 : (purīm) . . . śāta-kumbhena mahatā prākāreṇābhisaṁ-vṛitaṁ ।

IV. 31, 27 : V, 2. 16: Kāñchanenāvṛitāṁ prākāreṇa mahāpurīm ।

III. 48, 11 : (Laṇkā-nāma purī śubhā) . . . prākāreṇa-parikshiptā pāṇḍureṇa ।

See also V, 3, 7, 33 ; V, 4, 2 ; V, 37, 39 ; V, 55, 32 ; VI, 3, 29 ; VI, 3, 32 ; VI, 24, 34 ; VI, 25, 24 ; VI, 25, 30 ; VI, 26, 12 ; VI, 38, 10, 11 ; VI, 31, 56, 98 ; VI, 42, 15, 21, 22, 45, 46 ; VI, 51, 8, 10 ; VI, 60, 15 ; VI, 65, 53 ; VI, 66, 1 ; VI, 67, 169 ; VII, 3, 27 ; VII, 5, 25 ; VII, 38, 37.

(10) *Mahābhārata* :

I. 207, 30 : Prākāreṇa cha saṁpannam . . . (pura-śreshṭham) ।

II. 80, 30 : Prākārāṭṭālakeshu ।

III. 160, 38 f. : (Vaiśravaṇāvāsam) . . . prākāreṇa parikshiptam ।
Sauvarṇena samantataḥ sarva-ratna-dyutimatā ।

III. 200, 90 ; 206, 7 : (Mithilāṁ) . . . harmya-prākāra-śobhanāṁ ।

See also III, 284, 2 ; IV, 11, 1 ; V, 143, 23 ; VIII, 33, 19 ; XII, 86, 6 ; XV, 5, 16 ; XVI, 6, 24.

(11) 'This inscription (Ranganatha inscrip. of Sundarapandya) was discovered on the east wall of the *second* prākāra of the temple.'

' Inscription on the north wall of the *fourth* prākāra of the Raṅganātha temple at Śrīraṅgam.'

' Inscription on the west wall of the *second* prākara of the Jambukeśvara temple.'

' Inscription on the south wall of the *second* prākāra of the Raṅganātha temple.'

' Inscription on the south-west corner of the *third* prākāra of the same temple.'—(Raṅganātha inscrip. of Sundarapandya, *Ep. Ind.*, Vol. III, pp. 7, 9, 10.)

(12) ' This inscription (Jambukeśvara inscrip. of Valaka-Kamaya) is engraved on the north wall of the *second* prākāra of the Śaiva temple of Jambukeśvara on the island of the Śrīraṅgam near Trichinopoly.'—(*Ep. Ind.*, Vol. III, p. 72.)

(13) ' This Grantha inscrip. is engraved on the north wall of the *first* prākāra of the Ādipurīśvara temple at Tiruvaṭṭiyur near Madras.'—(*Ep. Ind.*, Vol. V, p. 106.)

(14) ' Raṅganātha inscrip. of Ravivarman of Kerala ' is on the north wall of the *second* prākāra of the temple of Raṅganātha (Vishṇu) on the island of Śrīraṅgam.'—(*Ep. Ind.*, Vol. IV, p. 148.)

(15) Śilāprākāra—an enclosure of stone for the temples of Kunti Mādhava and Bhimeśvara.—(Pithāpuram Pillar inscrip. line 11, second Drākshārāma Pillar inscrip., lines 13–14, *Ep. Ind.*, Vol. IV, pp. 329, 330.)

(16) Durggaṁ cha Tāmra-nagarīm abhito vyādhatta Prākāram uṁnatam udaṁchita-gopuraṁ saḥ—' he surrounded the Tāmra nagarī with a wall surmounted by towers.'—(Chebrolu inscrip. of Jaya, v. 27, *Ep. Ind.*, Vol. V, pp. 147, 149.)

(17) Māṭa-kūṭa-prākāra-khaṇḍa-sphuṭita-jīrṇṇoddhārakaṁ—' for the reparis of whatever might become broken or torn or worn out belonging to the enclosure ' (the more usual expression here would be ' Prāsāda '). Dr. Fleet, *Ep. Ind.*, Vol. V, p. 249, note 6.—(Inscrip. at Ablur, no. E, lines 59, 75, *Ep. Ind.*, Vol. V, pp. 249, 257, 250, 258.)

(18) Kiṁjalpitena bahunā grāva-prākāra-valaya-bāhyam iha ।

(Gadag inscrip. of Vira-Ballala II, v. 47, *Ep. Ind.*, Vol. VI, p. 97.)

(19) Prākāram atyunnataṁ—a very high wall.

(Maṅgalagiri Pillar inscrip. v. 47, *Ep. Ind.*, Vol. VI, pp. 124, 125.)

(20) Prākāraiḥ pātitais samyak parikhāḥ paripūryya yaḥ ।
Pradhvasaṁ ripu-durggāṇāṁ prāg-bhāva-samaṁ vyadhāt ।

(Two pillar inscrip. at Amaravati, no. A, inscrip. of Keta II, v. 19, *Ep. Ind.*, Vol. VI, p. 150.)

(21) Iha vijayinā prākāra-śrīr mmahopala-nirmmitā jala-dhārāgatir aty-aty-unnā niroddhum ivoddhatā ।

(Two Bhuvaneśvara inscrip. no. A, of Svapneśvara, v. 24, *Ep. Ind.*, Vol. VI, p. 202.)

(22) Gopura-prākārotsava-maṁṭapair upachitam ।

(Kondavidu inscrip. of Krishnaraya, v. 27, line 118, *Ep. Ind.*, Vol. VI, pp. 237, 231, 232.)

(23) Mahāmaṇḍapaṁ prākāraṁ para-mālikāvilasitaṁ muktāmayīṁ cha prapā(bhā)m ।

(Fourteen inscrip. at Tirukkovalur, no. K, lines 1–2, *Ep. Ind.*, Vol. VII, 145–46.)

(24) Prākāraḥ Kanakāchale virachitaḥ—built extensive ramparts on the Kanakāchala (the name of the fort of Jālar, Mr. Ojha). Prof. Kielhorn.—(The Chahamanas of Naddula, no. C, Sundhā Hill inscrip. of Chāchigadeva, v. 38, *Ep. Ind.*, Vol. IX, pp. 77, 73.)

(25) Paritaḥ praṇavākāra-pra(prā)kāra-valayāṁchitaṁ—'encircled by a wall of the shape of the praṇava.'—(Kṛishṇapuram plates of Sadasivaraya, v, 55, *Ep.Ind.*, Vol. IX, pp. 336, 341.)

(26) 'There are several similar inscriptions in the outer wall of the (Velur) temple, viz., two on the pedestal of the two dvāra-pālakas in front of the gopura, one on the left outer wall of the inner prākāra . . .'—(*H.S.I.I.*, Vol. I, p. 127.)

(27) 'This inscription (no. 85, *H.S.I.I.*, Vol. III) is engraved on the right of the entrance into the east wall of the prākāra of the Vāmanapurīśvara temple at Tirumāṇikuli in the Cuddalore Tāluka of the South Arcot District.'—(*H.S.I.I.*, Vol. III, p. 209.)

(28) 'This inscription (*H.S.I.I.*, Vol. III, no. 88) is engraved on the left of the entrance to the north wall of the fourth prākāra of the Raṅganātha temple on the island of Śriraṅga near Trichinopoly.'—(*H.S.I.I.*, Vol. III, p. 217.)

(29) 'For this Prasanna-Virūpāksha, a temple, enclosing wall (prākāra), gopura, finial covered with gold, and a Manmatha tank were constructed.'—(*Ep. Carnat.*, Vol. X, Mulbagal Taluq, no. 2; Roman Text, p. 82; Transl., p. 71.)

(30) Kāñchīpura-prākārāntarita-pratāpam akarod yaḥ Pallavānāṁ patim—'he caused leader of the Pallavas . . . to hide his prowess behind the ramparts of (the city) of Kāñchipura.'—(Sanskrit and Old Kanarese inscrip., no. LV, line 14, *Ind. Ant.*, Vol. VIII, pp. 242, 245, c. 1, line 23 f.)

(31) 'There are three enclosures (prākāras) in the Tiruveḷḷaṛai Temple, the first two being studded with inscriptions.'—(Notes in the Tiruveḷḷarai inscrip, *Ind. Ant.*, Vol. XXXIV, p. 264, para. 5, lines 1–2.)

(32) ' The stone prākāra or compound wall (of the Amṛiteśvara temple at Amṛitāpura in the Tarikere Taluq, described and illustrated in the *Mysore Archaeological Reports* for 1911–12, pp. 24–26, and frontispiece) is now in ruins. It had on the top all round thick stone discs, about 6½ feet in diameter, with rectangular bases, both in one piece, the outer faces being sculptured with fine figures of flowers, animals, gods, etc., in relief . . . The prākāra must have once presented the appearance of a veritable art-gallery, seeing that the artistically carved figures are of various kinds and designs.'—(V. A. Smith, Architecture and Sculpture in Mysore, *Ind. Ant.*, Vol. XLIV, p. 93, para. 6.)

PRĀGATA—A type of pavilion.

(*M.*, XXXIV, 410 ; *see* under MAṆḌAPA.)

PRĀG-VAṀŚA—An auxiliary shed to a sacrificial room.

PRĀṄGAṆA (*see* AṄGANA)—The court, the courtyard.

(1) Kathā-sarit-sāgara (*Pet. Dict.*) :

59, 26 : Nṛipāsthāna-prāṅgaṇam ।

15, 89 : Sā prāṅgaṇa-dvāra-kavāṭānta-vilambinī ।

(2) Hitopadeśa (2, 3, etc.) : Tasya prāṅgaṇe gardhabho baddhas tishṭhati kukkuraś chopavishṭaḥ ।

(3) *Rājataraṅginī* (1, 247, etc.) : Prāṅgaṇād bahiḥ ।

(4) *See* the first Praśasti of Baijnath, v, 34, *Ep. Ind.*, Vol. I, pp. 107, 111.

(5) *Cf.* Kālapriya(name of the god and temple of Mahākāla at Ujjain), prāṅgaṇam tīrṇṇā ।—(Cambay Plates of Govinda IV, v. 19, *Ep. Ind.*, Vol. VII, pp. 38, 29.)

RĀDEŚA (*see* AṄGULA)—The distance between the tips of the fully-stretched thumb and forefinger.

(1) Daśatva(? ā)ṅgula-parvāṇi prādeśa iti saṁjñitaḥ ॥
Aṅgushṭhasya prādeśinyā vyasa-(ḥ) prādeśa uchyate ।
(*Brahmāṇḍa-Purāṇa*, Part I, 2nd Anushaṅgapāda, Chap. VII, vv. 96, 97.)

(2) Aṅgushṭha-tarjanī-yuktaṁ prādeśam iti kīrtitam ।
(*Suprabhedāgama*, XXX, 21.)

PRĀSĀDA—A temple, a palace, an edifice, buildings in general, a platform, a Buddhist assembly or confessional hall.

Harmyādi dhanināṁ vāsaḥ prāsādo deva-bhū-bhujām ।
(*Amarakōsha*, II, 2, 9.)

(1) *Mānasāra* :

Temple :

Prāsāda-maṇḍapaṁ chaiva sabhā-śālā-prapā-(ṁ) tathā ।
(A)raṅgam iti chaitāni harmyam uktaṁ(-tāni) purātanaiḥ ।
(*M.*, III, 7–8.)

Prāsāda-maṇḍapaṁ tathā varuṇādi-deśe ।
Sāṅge cha gopura-pade tv-apareshu sarve ।
(There should not be any defect).

(*M.*, LXIX, 70, 71.)

The palace of a king :

Nṛipa-prāsāda-saṁyuktā (bhumiḥ) samā chaitya-samīpagā ।

(*M.*, IV, 23.)

Palaces are elaborately described (*M.*, XLI, 1–51 ; *see* under RĀJAHARMYA.)

Buildings in general (called Vimāna in the *Mānasāra* and Prāsāda in the works quoted below) :

The general description (*M.*, XVIII, 1–418) :

They are used as residences of gods and men :

Taitilānāṁ dvijātīnāṁ varṇānāṁ vāsa-yogyakam । (2)

Their sizes (*see* details below)—from one to twelve storeys :

Eka-bhūmi-vimānādi-ravi-bhūmy-avasānakam । (3)

Their plans (lines 12–91) ; *see* under VIMĀNA-LAKSHAṆA.

The three styles and their characteristic features (92–105) are given under NĀGARA, DRĀVIḌA and VESARA.

The description of the towers and domes (106–137 ; *see* under STŪPI).

The building materials are stone, brick, timber and iron (138).

I. Three classes of buildings—Śuddha or pure, made of one material (lines 139, 140) ; Miśra or mixed, made of two materials (lines 139, 140) and Saṁkīrṇa or amalgamated, made of three materials, namely stone, brick and timber (lines 139, 141) : one material alone is especially recommended (line 142).

Description of the Stūpi-kīla which comprises all the parts above the Stūpi or dome is given in detail (lines 145–417).

Chap. XIX (named Eka-bhūmi) :

The classifications :

II. Referring to measurement, in accordance with the various cubits—Jāti (lines 2, 3), Chhanda (lines 2, 4), Vikalpa (lines 2, 4), and Ābhāsa (lines 2, 5).

III. Sthānaka referring to height (line 7), Āsana referring to breadth (line 8), and Śayana referring to width or length (line 9).

IV. The same are otherwise called Saṁchita (line 10), Asaṁchita (line 10) and Apasaṁchita (line 11) respectively. These classes of buildings also refer to the postures of the idols, namely erect, sitting and recumbent respectively. But the details of these postures are reserved for a subsequent chapter.

V. Masculine buildings are equiangular (line 14) and have male deities in them (line 16), feminine buildings are rectangular (line 18) and house

female deities (line 16) ; but in the feminine class of buildings the male deities also can be installed (line 17).

The details of the component parts of the ground floor are common for various types which are described below (lines 18–164).

VI. The eight kinds of the single-storeyed buildings with their characteristic features (Chap. XIX, 1–264) :

(1) Vaijayantika is furnished with round spire (śīrsha), pinnacle (śiraḥ) and neck (grīva) (line 166) ; (2) Bhoga has similar wings (line 167); (3) Śrīviśāla has the bhadra or front porch in it (line 168) ; (4) Svasti-bandha has the octangular finial (line 169) : (5) Śrīkara has a quadrangular steeple (line 170) ; (6) Hasti-pṛishṭha has an oval steeple (line 171) ; (7) Skandatāra has a hexagonal spire and neck (line 172) ; and (8) Kesara has the front porch, the side-towers at the corners of the roof, and its nose, head and neck are round or quadrangular (lines 173–175). For further details, *see* EKA-BHŪMI.

VII. The eight kinds of the two-storeyed buildings (Chap. XX, 1–114) :

(The generl features are similar in all the eight kinds, the distinction lying in the different proportions given to the component parts from above the ground floor to the top.)

(9) Śrīkara (lines 94, 2–9) ; (10) Vijaya (lines 94, 10–15) ; (11) Siddha (lines 94, 16–18) ; (12) Pārshṇika or Paushṭika (lines 94, 19–25) ; (13) Antika (lines 94, 26–27) ; (14) Adbhuta (lines 94, 28–33) ; (15) Svastika (lines 95, 35–41) ; and (16) Pushkala (lines 94, 42–43).

The projection, general features, and carvings on the doors when these buildings are used as temples are described (lines 44–93, 96–116).

For further details, *see* DVI-TALA.

VIII. The eight kinds of the three-storeyed buildings (Chap. XXI, 1–74) :

(The general features and the characteristic marks are similar to those of the two-storeyed buildings.)

(17) Śrīkānta (lines 2–11) ; (18) Āsana (lines 12–21) ; (19) Sukhālāya (lines 22–30) ; (20) Kesara (lines 31–32) ; (21) Kamalāṅga (lines 33–38) ; (22) Brahma-kānta (lines 39–40) ; (23) Meru-kānta (lines 41–49) ; and (24) Kailāśa (lines 50–52). For further details, *see* TRI-TALA.

The general features, characteristic marks and concluding details of the following kinds are similar, except the number of storeys, to those of the two- and three-storeyed buildings.

IX. The eight kinds of the four-storeyed buildings (Chap. XXII, 1–106) :

(25) Vishṇu-kānta (lines 3–12) ; (26) Chatur-mukha (lines 13–24) ;

(27) Sadā-śiva (lines 25–33) ; (28) Rudra-kānta (lines 34–43) ; (29) Iśvara-kānta (lines 44–46) ; (30) Mañcha-kānta (lines 47–57) ; (31) Vedi-kānta (lines 58–59) ; and (32) Indra-kānta (lines 60–88). For further details, *see* CHATUS-TALA.

X. The eight kinds of the five-storeyed buildings (Chap. XXIII 1–50) :

(33) Airāvata (lines 3–12) ; (34) Bhūta-kānta (lines 13–15) ; (35) Viśva-kānta (lines 16–18) ; (36) Mūrti-kānta (lines 19–24) ; (37) Yama-kānta (lines 25–29) ; (38) Gṛiha-kānta (lines 30–32) ; (39) Yajña-kānta (lines 33–40) ; and (40) Brahma-kānta (lines 41–42). For further details, *see* PAÑCHA-TALA.

XI. The thirteen kinds of the six-storeyed buildings (Chap. XXIV, 1–48.) :

(41) Padma-kānta (lines 3-12) ; (42) Kāntāra (lines 13–14) : (43) Sundara (line 15) ; (44) Upa-kānta (line 16) ; (45) Kamala (lines 17–18) ; (46) Ratna-kānta (line 19) ; (47) Vipulāṅka (line 20) ; (48) Jyoti(sh)-kānta (line 50) ; (49) Saroruha (line 50) ; (50) Vipulākṛitika (line 52) ; (51) Svasti-kānta (line 53) ; (52) Nandyāvarta (line 54) ; and (53) Ikshu-kānta (line 55). For further details, *see* SHAṬ-TALA.

XII. The eight kinds of the seven-storeyed buildings (Chap. XXV, 1–40) :

(54) Puṇḍarīka (lines 3-23) ; (55) Śrī-kānta (line 24) ; (56) Śri-bhoga (line 25) ; (57) Dhāraṇa (line 26) ; (58) Pañjara (line 27) ; (59) Āśramāgāra (line 28) ; (60) Harmya-kānta (line 29) ; and (61) Hima-kānta (line 30). For further details, *see* SAPTA-TALA.

XIII. The eight kinds of the eight-storeyed buildings (Chap. XXVI, 1–76.) :

(62) Bhū-kānta (lines 3–21) ; (63) Bhūpa-kānta (lines 22–28) ; (64) Svarga-kānta (lines 29–34) ; (65) Mahā-kānta (lines 35–39) ; (66) Jana-kānta (line 40) ; (67) Tapa(s)-kānta (lines 41–42) ; (68) Satya-kānta (lines 43-45) ; and (69) Deva- kānta (lines 46–47). For further details, *see* ASHṬA-TALA.

XIV. The seven kinds of the nine-storeyed buildings (Chap. XXVII, 1-48.) :

(70) Saura-kānta (lines 5–9) ; (71) Raurava (line 10) ; (72) Chaṇḍita (lines 11–12) ; (73) Bhūshaṇa (lines 13–14) ; (74) Vivṛita (lines 20–22) ; (75) Suprati-kānta (lines 23–26) ; and (76) Viśva-kānta (lines 27–33). For further details, *see* NAVA-TALA.

XV. The six kinds of the ten-storeyed buildings (Chap. XXVIII, 1–40.) :

(77) Bhū-kānta (lines 6–8) ; (78) Chandra-kānta (lines 6-8) ; (79) Bhavana-kānta (lines 9-13) ; (80) Antarīksha-kānta (lines 14–15) ; (81) Megha-kānta (lines 16–17) ; and (82) Abja-kānta (line 18). For further details, *see* DAŚA-TALA.

XVI. The six kinds of the eleven-storeyed buildings (Chap. XXIX, 1–50.) : (83) Śambhu-kānta (lines 3–7) ; (84) Īśa-kānta (lines 8–9) ; (85) Chakra-kānta (lines 10–14) ; (86) Yama-kānta (lines 15–17) ; (87) Vajra-kānta (lines 18-24) ; and (88) Akra-kānta (lines 24–33). For further details, *see* EKĀDAŚA-TALA.

XVII. The ten kinds of twelve-storeyed buildings (Chap. XXX, 1–194.) : (89) Pāñchāla (lines 8–10) ; (90) Drāviḍa (lines 8–10) ; (91) Madhya-kānta (lines 11–14) ; (92) Kāliṅga-kānta (lines 14–16) ; (93) Varāṭa (? Virāṭa) (lines 17–27) ; (94) Kerala (lines 28–30) ; (95) Vaṁśa-kānta (lines 31–32) ; (96) Māgadha-kānta (lines 33–34) ; (97) Jana-kānta (lines 35–36) ; and (98) Sphūrjaka (lines 7, 37–84, description of the twelfth storey).

These ten kinds are named, it should be noticed, after the historic places well marked in the ancient geography of India, which cover the whole length and breadth of the Indian Continent. Of these, the Pāñchāla and the Drāviḍa are stated to be of the smallest type (line 10), next in size and importance are respectively the Madhya-kānta, the Kāliṅga-kānta, the Varāṭa (? Virāṭa), the Kerala, and the Vaṁśa-kānta. The largest and the most important are the Māgadha (connected with the capital of King Aśoka and of the early Gupta Emperors) and the Jana-kānta, and also perhaps the Sphūrjaka, which, however, is not specified in detail (11).

The architectural details of these buildings will be found under these ten terms. The description of the twelfth storey is given under DVĀDAŚA-TALA.

(2) *Agni-Purāṇa*, Chap. XLII, VV. 1–9 (general plan), 10–25 (plan with reference to the idol), Chap. CIV, VV. 1–11, 22–34 (further general plan), 11–21 (names, classes, shapes and description of forty-five kinds of temples) :

Prāsādaṁ saṁpravakshyāmi sarva-sādhāraṇaṁ śṛiṇu ॥
Sarva-sādhāraṇaṁ chaitat prāsādasya cha lakshaṇaṁ ।
Mānena pratimāyā vā prāsādaṁ aparaṁ śṛiṇu ॥
(Chap. XLII, VV. 1, 9.)

Vakshye prāsāda-sāmānya-lakshaṇaṁ te śikhidhvaja ।
(Chap. CIV, V. 1.)

Five divisions depending on five shapes or plans, and each including nine kinds of temples (Chap., CIV, VV. 11–13) :

I. Vairāja—quadrangular or square—includes :
(1) Meru, (2) Mandara, (3) Vimāna, (4) Bhadra, (5) Sarvato-bhadra, (6) Charuka (Ruchaka, in the *Kāmikāgama*, XXXV, 87, 91), (7) Nandika, (8) Nandi-vardhana, and (9) Śrīvatsa.—(Chap. CIV, VV. 14, 15.)

II. Pushpaka—rectangular—includes :

(10) Ba(Va)labhī, (11) Gṛiha-rāja, (12) Śālā-gṛiha or Śālā-mandira, (13) Viśāla, (14) Sama, (15) Brahma-mandira, (16) Bhavana or Bhuvana, (17) Prabhava, and (18) Śivikā-veśma.—(Chap. CIV, vv. 16, 17.)

III. Kailāśa—round—includes :

(19) Ba(Va)laya, (20) Dundubhi, (21) Padma, (22) Mahā-padmaka, (23) Varddhanī, (24) Ushṇishī, (25) Śaṅkha, (26) Kalaśa, and (27) Sva-vṛiksha.—(Chap. CIV, vv. 17, 18.)

IV. Maṇika—oval (vṛittāyata)—includes :

(28) Gaja, (29) Vṛishabha, (30) Haṁsa, (31) Garutman, (32) Ṛiksha-nāyaka, (33) Bhūshaṇa, (34) Bhū-dhara, (35) Śrījaya, and (36) Pṛithivī-dhara.—(Chap. CIV, vv. 19, 20.)

V. Tri-vishṭapa—octangular—includes :

(37) Vajra, (38) Chakra, (39) Svastika, (40) Vajra-svastika, (41) Chitra, (42) Svastika-khaḍga, (43) Gadā, (44) Śrikaṇṭha, and (45) Vijaya.—(Chap. CIV, vv, 20, 21.)

(3) *Garuḍa-Purāṇa* (Chap. XLVII) has exactly the same general plan (vv. 1–20, 32–47), five shapes, five classes (vv. 21–23), and 45 kinds of buildings (vv. 24–32); but the wording is not identical. The fourth class is called Mālikā (v. 21) in the general description but the other reading, Maṇika, (v. 30) is given later on :

I. Vairāja—square (vv. 21–22)—includes the same nine kinds, but (7) Nandika is called Nandana, and (6) Charuka is correctly read as Ruchaka (vv. 24–25).

II. Pushpaka—rectangular (vv. 21–22)—includes nine kinds, of which (10) Valabhī is correctly spelt, (13) Viśāla is read as Vimāna, which is apparently a mistake in the *Garuḍa-Purāṇa* because (3) Vimāna is a kind of building included in the square (I) Vairāja class. But the reading of the Pushpaka class (II) seems better in the *Garuḍa-Purāṇa*, which may be quoted here :

(10) Valabhī, (11) Gṛiha-rāja, (12) Śālā-gṛiha, (13) Mandira, (14) Viśāla (text has Vimāna), (15) Brahma-mandira, (16) Bhavana, (17) Uttambha, and (18) Śibi(-vi)kā-veśma.—(Chap. XLVII, vv. 26–27.)

III. Kailāśa—round (vv. 21, 23)—includes nine kinds which also seem to have better reading :

(19) Valaya, (20) Dundubhi, (21) Padma, (22) Mahā-padma, (23) Mukuli (in place of Vardhanī), (24) Ushṇīshī, (25) Śaṅkha, (26) Kalaśa, and (27) Guvā-vṛiksha.—(Chap. XLVII, vv. 28–29.)

IV. Maṇika—oval (v. 30)—includes the same nine kinds of which, however, (31), (32), and (33) are read as Garuḍa, Siṁha, and Bhūmukha respectively (vv. 29, 30).

V. Tri-vishṭapa—octangular (vv. 21, 23)—includes nine kinds which seem to be better read here :

(37) Vajra, (38) Chakra, (39) Mushṭika (preceded by Babhru, v. 31). (40) Vakra, (41) Svastika, (42) Khaḍga, (43) Gadā, (44) Śri-vṛiksha, and (45) Vijaya.—(Chap. XLVII, vv. 31–32.)

(4) *Matsya-Purāṇa* (Chap. CCLXIX, vv. 1–7, 8–14, 15–20, 21–27) :

(*a*) The general plan :

Evaṁ vāstu-baliṁ kṛitvā bhajet shoḍaśa-bhāgikam ।
Tasya madhye chaturbhis tu bhāgair garbhaṁ tu kārayet ॥ (1)
Bhāga-dvā-daśaka-sārdhaṁ tatas tu parikalpayet ।
Chatur-dikshu tathā jñeyaṁ nirgamaṁ tu tato budhaiḥ ॥ (2)
Chatur-bhāgena bhittīnām uchchhrayaḥ syāt pramāṇataḥ ।
Dvi-guṇaḥ śikharochchhrayo bhitty-uchchhraya-pramāṇataḥ ॥ (3)
Śikharārdhasya chārdhena vidheyā tu pradakshiṇā ।
Garbha-sūtra-dvayaṁ chāgre vistāro maṇḍalasya tu ॥ (4)
Āyataḥ syāt tribhir bhāgair bhadra-yuktaḥ suśobhanaḥ ।
Pañcha-bhāgena saṁbhajya garbha-mānaṁ vichakshaṇaḥ ॥ (5)
Bhāgam ekaṁ gṛihītvā tu prāg-grīvaṁ kalpayed budhaḥ ।
Garbha-sūtra-sama-bhāgād agrato mukha-maṇḍapaḥ ॥ (6)
Etat sāmānyam uddishṭaṁ prāsādasya cha lakshṇam । (7)

This description of the general plan is followed by that of some special plans (*see* vv. 8–14, 15–20).

Sāmānyam aparaṁ tad-vat prāsādaṁ śṛiṇuta dvijāḥ ।
Tri-bhāgaṁ kārayet kshetraṁ yatra tishṭhanti devatāḥ ॥ (21)
Rathāṅkas tena mānena bāhya-bhāga-vinirgataḥ ।
Nemī pādena vistīrṇā prāsādasya samantataḥ ॥ (22)
Garbhaṁ tu dvi-guṇam kuryāt tasya mānaṁ bhaved iha ।
Sa eva bhitter utsedho dvi-guṇaḥ śikharo mataḥ ॥ (23)
Prāg-grīvaḥ pañcha-bhāgena nishkāsas tasya chochyate ।
Kārayet sushiraṁ tad-vat prākārasya tri-bhāgataḥ ॥ (24)
Prāg-grīvaṁ pañcha-bhāgena nishkāsheṇa viśeshataḥ ।
Kuryād vā pañcha-bhāgena prāg-grīvaṁ karṇa-mūlataḥ ॥ (25)
Sthāpayet kaṇakaṁ tatra garbhānte dvāra-mūlataḥ ।
Evaṁ tu tri-vidhaṁ kuryāj jyeshṭha-madhya-kaṇīyasam ॥ (26)
Liṅga-mānānubhedena rūpa-bhedena vā punaḥ ।
Ete samāsataḥ proktā nāmataḥ śṛiṇutādhunā ॥ (27)

(*b*) The names (vv. 28–30), description of architectural details (vv. 31–46), measures (vv. 47–51), and division (vv. 53–54), of twenty kinds of buildings (temples) :

(1) Meru has 100 cupolas (śṛiṅgha), 16 storeys (bhūmikā), many variegated spires (śikharas), and is 50 cubits broad (vv. 28, 31, 53).

(2) Mandara has 12 storeys, many spires and faces, and is 43 cubits broad (vv. 28, 37, 47, 53).

(3) Kailāśa has nine storeys, many spires and faces, and is 40 cubits broad (vv. 32, 47, 53).

(4) Vimāna-chchhanda has eight storeys, many spires and faces, and is 34 cubits broad (vv. 25, 32, 33, 47, 53).

(5) Nandi-vardhana has seven storeys, and is 32 cubits broad (vv. 29, 33, 48, 53).

(6) Nandana has seven storeys, and is furnished with horns (vishāṇa) and is 30 cubits broad (vv. 29, 33, 48, 53).

(7) Sarvato-bhadra has five storeys, 16 corners with various shapes, furnished with art-galleries (chitra-śālā), and is 30 cubits broad (vv. 29, 34, 35, 48, 53).

(8) Vallabhi-chchhandaka has five storeys, many spires and faces, and is 16 cubits broad (vv. 35, 50, 53).

(9) Vṛisha should resemble the height and length of the bull, should be round and without corners; it should have five cupolas and two storeys, and it should be 4 cubits at the central hall (vv. 30, 36, 44, 45, 53).

(10) Siṁha resembles the lion and is 16 cubits broad, is adorned with prominent top-rooms, and should be at the front neck six storeys high (vv. 29, 36, 40, 49, 53).

(11) Gaja resembles the elephant and is 16 cubits broad, and has many top-rooms (vv. 36, 41, 49, 53).

(12) Kumbha resembles the water-jar, has nine storeys, five cupolas and a cavity (aṅguli-puṭa-saṁsthāna), and is 16 cubits broad (vv. 37, 49, 53).

(13) Samudraka has 16 sides around, two top-rooms (? gable windows) at the two sides, and two storeys (vv. 38, 53).

(14) Padma has three storeys, 16 corners, a variegated auspicious spire and is 20 cubits broad (vv. 30, 39, 49, 53).

(15) Garuḍa has the bird-shape around, seven storeys and three top-rooms, is 8 cubits broad, and there should be 86 storeys or compartments (bhūmikā) (v. 42) all around the outside (vv. 41, 43, 51). There is a similar Garuḍa-building with ten storeys and a second Padmaka building with two storeys more (i. e., twelve storeys, v. 43).

(16) Haṁsa (goose)-shaped is 10 cubits broad (vv. 30, 51).

(17) Vartula (ball or round)-shaped is 20 cubits broad (vv. 29, 49, 53).

No special description is given of the remaining kinds :

(18) Chatur-aśra (four-cornered, vv. 28, 53).

(19) Ashṭāśra (eight-cornered, vv. 29, 53).

(20) Shoḍaśāśra (sixteen-cornered, vv. 29, 53).

The three divisions of these buildings according to three sizes :

Tathā mervādayaḥ sapta jyeṣṭha-liṅge śubhāvahaḥ ।
Śrīvṛikshakā(-valabhī-ā)dayaś chāshtau madhyamasya pra-kīrtitaḥ ॥ (53)

Tathā haṁsā(Siṁhā)dayaḥ pañcha kanyase śubhadā matāḥ ॥ (54)

Similar kinds of prāsādas (temples) are described almost in the same manner in both the *Bhavishya-Purāṇa* and the *Bṛihat-Saṁhitā*.

(5) *Bhavishya-Purāṇa*, Chap. cxxx, names (vv 23–26), description of the architectural details and measures (vv. 27–35), and the twenty kinds of buildings (almost same as in the *Bṛihat-Saṁhitā*, *see* below) :

(1) Meru is 39 cubits high and 32 cubits broad, has twelve storeys, various windows (kuhara) and four gateways (v. 27). (2) Mandara is 30 cubits broad and has ten storeys (v. 28). (3) Kailāśa is 28 cubits broad, has spires and finials, and eight storeys (v. 28).

The description of the following is clearer in the *Bṛihat-Saṁhitā*, quoted below. The names are given here :

(4) Vimāna with latticed windows (v. 29) ; (5) Nandana (v. 29) , (6) Samudga (v. 30), but Samudra (v. 24) as in the *Bṛihat-Saṁhitā* (LVI, 28–53) ; (7) Padma (v. 30) ; (8) Garuḍa (v. 31) ; (9) Nandi-vardhana (v. 29, but Nandī, v. 31) ; (10) Kuñjara (v. 32) ; (11) *Gṛiha-rāja* (v. 32) : *Bṛihat-Saṁhitā* (LVI, 25) reads Guha-rāja ; (12) Vṛisha (v. 33) ; (13) Haṁsa (v. 33) ; (14) Ghaṭa (v. 33) ; (15) Sarvato-bhadra (v. 34) ; (16) Siṁhā (v. 35) ; (17) Vṛitta (as in the *Bṛihat-Saṁhitā*, LVI 29, 49) but here (v. 33) it is read Vṛisha like (12), which is apparently a mistake (*see* v. 30).

No special description is given of the remaining kinds :

(18) Chatush-koṇa (four-cornered, v. 25) : *Matsya-Purāṇa* (Chap. CCLXIX, vv. 28, 53) reads Chatur-asra, and *Bṛihat-Saṁhitā* (LVI, 28) has Chatur-aśra ; (19) Ashṭāsra (octangular, v. 25) ; (20) Shoḍaśāśra (sixteen-cornered, v. 25).

(6) *Bṛihat-Saṁhitā* (LVI, 1–19) :

The religious merits acquired by building temples (vv. 1–2).

The suitable sites are stated to be gardens, woods, banks of rivers, seas or tanks (vv. 3–8); ground (v. 9); general plan (v. 10); situation of doors (v. 10); comparative measures of the length, breadth, and height (v. 11); of the

adytum (garbha, v. 12), of the doors and their different parts (vv. 12–14); carvings on doors (v. 15); comparative measures of the idol, pedestal, and door (v. 16); the heights of storeys (vv. 29–30).

This is followed by the classification (vv. 17–19) and the description of the architectural details (vv. 20–28) of the same twenty kinds of temples (prāsāda) as are given in the *Matsya-Purāṇa* and the *Bhavishya-Purāṇa*. The names of these buildings are given below : their details which are almost same as in the *Purāṇas*, will be found described under these terms :

(1) Meru (v. 20); (2) Mandara (v. 21); (3) Kailāśa (v. 21); (4) Vimāna-(chchhanda) (vv. 17, 22); (5) Nandana (v. 22); (6) Samudga (v. 23); (7) Padma (v. 23); (8) Garuḍa (v. 24); (9) Nandivardhana (v. 24); (10) Kuñjara (v. 25); (11) Guha-rāja (v. 25); (12) Vṛisha (v. 26); (13) Haṁsa (v. 26); (14) Ghaṭa (v. 26); (15) Sarvato-bhadra (v. 27); (16) Siṁhā (v. 28); (17) Vṛitta (vv. 18, 28); (18) Chatush-koṇa (vv. 18, 28); (19) Ashṭāśra (vv. 18, 28); (20) Shoḍaśāśra (vv. 18, 28).

(7) *Kāmikāgama* :

No distinction is made between PRĀSĀDA and VIMĀNA (*cf.* also the *Mānasāra*, L, 40, etc.) :

Jātyādi-bhedakair yuktaṁ vimānam saṁpadām(-s)-padam ।

(LV, 131, this chapter is named Prāsāda-bhūshaṇa.)

Buildings in general (LV, 1–210) ;

Their component parts :

Prāsāda-bhūshaṇa(ṁ) vakshye śrūyatāṁ dvijasattamāḥ ।
Syāt pāda-prastaraṁ-grīva-varge mūle tu vedikā ॥ (1)

Shapes and kinds of Prāsāda (buildings in general) :

Yānaṁ vā śayanaṁ vāpi gopurākṛitir eva vā ।
Pīṭhākṛitir vā mervādi-parvatākṛitir eva vā ॥ (194)
Nandyākṛitir vā dhāma vidheyaṁ cheṣṭa-deśake ।
Maṇḍape gopure vapre parivārālayādishu ॥
Evam evaṁ vidheyaṁ syāt tathā bhuvi viśishyate ॥ (195)

The synonyms :

Vimānaṁ bhavanaṁ harmyaṁ saudhaṁ dhāma niketanam ।
Prāsādaḥ sadanaṁ sadma geham avasathaṁ gṛiham ॥ (208)
Ālayaṁ nilayaṁ vāso'py-ālayo vastu-vāstukam ।
Kshetram āyatanaṁ veśma mandiraṁ dhishṇakaṁ padam ॥ (129)
Layaṁ kshayam āgāraṁ cha tathodāvasitaṁ punaḥ ।
Sthānam ity-evam uktāni paryāya-vachanāni hi ॥ (210)

The four classes :

Jāti (v. 128), Chhanda (129), Vikalpa (130), and Ābhāsa (130).

The Chapter LV refers to the description of a single building and its component parts.

So also does the Chapter XLV (*see* under MĀLIKĀ) ; it is named Mālikā-(lakshaṇa), but it does not mean anything but Prāsāda : Prāsāda-vyāsa-dirghochchā proktā prāsāda-mālikā ॥ (4)

Further classifications (Chapter XLV) :

I. Saṁchita, Apasaṁchita, and Upasaṁchita (v. 6).

II. Nāgara (vv. 6, 12, 13), Drāviḍa (vv. 6, 14, 15), and Vesara (vv. 7, 16–18).

III. Jāti (vv. 7, 19), Chhanda (vv. 7, 20,) and Vikalpa (vv. 7, 20).

IV. Śuddha (vv. 7, 21), Miśra (vv. 7, 22), and Saṁkīrṇa (vv. 7, 22).

V. Puṁliṅga or masculine also called Saṁchita (vv. 8, 9), Strī-liṅga or feminine (vv. 9, 10), and Napuṁsaka or neuter (v. 11).

This class (V) does not refer (like the *Mānasāra*) to the sexes of the deities installed in temples. Here they appear like residential buildings. Their characteristic features are determined by sóme architectural details (*see* under these terms—PUṀLIṄGA, etc.).

The distinguishing marks of the other four classes (I to IV) are similar to those of the *Mānasāra* noticed above (*see* the details under those terms, Saṁchita, Nāgara, etc.).

VI. The technical names of Prāsāda :

(1) Sindhuka (Chap. XLV, vv. 23–28) ; (2) Saṁpūrṇa (vv. 29–30) ; (3) Meru-kūṭa (v. 31) ; (4) Kshema (vv. 32–34) ; (5) Śiva (vv. 35–38) ; (6) Harmya (vv. 39–40) ; (7) Saumya (v. 40) ; (8) Viśāla (v. 41) ; (9) Sarva-kalyāṇa (vv. 42–49) ; (10) Vijaya (v. 50) ; (11) Bhadra (v. 51) ; (12) Raṅga-mukha (v. 52) ; (13) Alpa (vv. 53–54) ; (14) Koṇa (vv. 55–58) ; (15) Geya (vv. 58*a*–59) ; (16) Sāra (v. 60) ; (17) Pushkara (vv. 61–63) ; (18) Adbhuta (v. 61*a*) ; (19) Saṁkīrṇa (v. 62) ; (20) Daṇḍa (v. 64).

See details under MĀLIKĀ and these terms.

In Chapter XXXV, Śālās, in almost the same sense as of Prāsāda, are divided into five classes, namely, Sarvato-bhadra (vv. 87-88), Vardhamāna (vv. 87, 88), Svastika (vv. 87, 89), Nandyāvarta (vv. 87, 90), and Charuka (vv. 87, 91).

Their characteristic features will be found under these terms.

(8) *Suprabhedāgama*, Chap. XXXI (named Prāsāda=temple) :

The nine kinds of width (vv. 1–3) ; the comparative measurements of the temple and adytum (vv. 4–6), of the inner and outer walls (vv. 6–8), of the liṅga or phallus and the pīṭha or pedestal (vv. 9-15).

The description of the four types of bases, namely, Padma-bandha, Chāru-bandha, Pāda-bandha, and Pratikrama (vv. 16–20).

The description of the ground floor consisting in the comparative measurement of the base, column, entablature, finial, dome, corner-tower, dove-cot, and spire (vv. 28–31).

All the twelve storeys are stated to be built in the same way :

Ādvā-daśa-talād evaṁ bhūmau bhūmau prakalpayet ।
Evam uktam ihotsedhaṁ dvāra-bhedaṁ tataḥ śṛiṇu ॥ (33)

The doors are then described (vv. 34–37).

Three styles of temples, namely, Nāgara, Drāviḍa and Vesara, are mentioned (v. 38).

Their essential features (vv. 38–39, *see* under those terms).

Ten types of temples :

(1) Kailāśa, (2) Mandara, (3) Meru, (4) Himavat, (5) Nishadha (also called Nīla-parvata, and Māhendra), (6) Nalīṇaka, (7) Pralīṇaka, (8) Nandyāvarta, (9) Śrīvarta (also Śrīpada), and (10) Parvata.

(*See* vv. 40–45.)

The comparative measurements of the storeys :

Evaṁ tale tale kāryaṁ nūnam ekaika-bhāgikam ॥ (53)

The five kinds of columns—Śrīkara, Chandra-kānta, Saumukhya (also Sumukha), Priya-darśana, and Śubhaṁkarī(-ra) (v. 65) ; their shapes—four-sided, eight-sided, sixteen-sided, cylindrical, and of the combination of the first two (v. 67). They may be with or without a kumbha or pitcher (v. 54). The general features of the component parts (vv. 55–64) and the special features of the five orders are described (vv. 66–67).

The description of the arches is given (vv. 68–71).

Some ornaments, like nāsikā (vestibule), vedikā (platform), śikhara (spire), stūpi (dome), etc., are also described (vv. 72–93).

Here closes the description of the temples :

Prāsāda-lakshaṇaṁ proktaṁ maṇḍapānāṁ vidhiṁ śṛiṇu ॥ (94)

This leads to the description of the detached buildings such as the pavilions, quarters for the attendant deities, gate-houses, and the enclosure, tanks, guest-houses, etc., which form parts of the temple in its wider sense.

The maṇḍapas or pavilions are first divided into four classes, namely, Deva(god)-maṇḍapa, snapana(bath)-maṇḍapa, Vṛisha (the bull, Nandin)-maṇḍapa, and Nṛitta (music)-maṇḍapa (vv. 96–97, 98–99).

They are further classified under the names Nanda-Vṛitta, Śriyā-vṛitta, Vīrāsana, Jaya-bhadra, Nandyāvarta, Maṇi-bhadra, and Viśāla (vv. 100–104).

These pavilions are distinguished by the number of columns they are furnished with :

Stambhānāṁ tu śatair yuktaṁ viśālam iti saṁjñitam ।
Prāsād-vat samākhyātaṁ prastarāntaṁ pramāṇataḥ ॥ (104)

The columns of the prāsādas and those of the maṇḍapas are stated to be differently measured :

Prāsāda-stambha-mānasya etat stambhaṁ viśishyate ॥ (105)

These latter columns have also other characteristic features (vv. 106–113).

The description of the pavilions closes with that of the flights of steps :

Sopānaṁ cha yathāyuktyā hasti-hastaṁ tathaiva cha ।
Evaṁ samāsataḥ proktaṁ maṇḍapaṁ vidhi-pūrvakam ॥ (114).

The prākāras or enclosures are then described (vv. 115–128). They are strikingly similar to those described in the *Mānasāra*.

This *Āgama* like the *Mānasāra* divides the whole compound into five enclosed quadrangular courts. In both the treatises, each of the courts is stated to be furnished with a separate gate-house. Moreover these gate-houses are given the same technical names in both the works, viz. Dvāra-śobhā (in the first court), Dvāra-śālā (in the second), Dvāra-prāsāda (in the third), Dvāra-harmya (in the fourth), and the Dvāra-gopura (in the fifth or the extreme boundary, mahā-maryādā ; *cf. Mānasāra* under GOPURA.)

The Parivārālayas (temples of attendant deities), which are made in some of these five courts, are described (129 f.), and are also similar in both the treatises.

In the remaining portion of the chapter some objects like the façades of the temples, etc., are described.

From the abstracts given above, it will be clear that this chapter of the *Suprabhedāgama* deals with all the essential parts of a temple, which in the *Mānasāra*, including the residential buildings, occupy a space of twenty-eight chapters (XIII to XXXIX, XLVI). The description of this *Āgama*, though brief, is very explicit and to the point. The language also of the *Suprabhedāgama* is much better than most of the architectural treatises I have consulted.

The attention of readers is invited to the lists of the buildings described in the eight works under observation.

The list in the *Mānasāra* contains under twelve classes (or storeys) 98 types of buildings ; the *Agni-Purāṇa* has under five classes 45 types, the *Garuḍa-Purāṇa* also has under the same five classes 45 types ; the *Mastya-Purāṇa* has under three classes 20 types ; the *Bhavishya-Purāṇa* has left out the broader divisions and contains 20 types ; the *Bṛihat-Saṁhitā* in the very same way contains 20 types ; the *Kāmikāgama* has under three divisions (of various kinds) 20 types ; and the *Suprabhedāgama* has left out all the minor divisions but has preserved the most important divisions, namely, the three styles (Nāgara, Vesara, and Drāviḍa) which comprise ten types of buildings.

The various broader divisions, such as the Śuddha, Saṁchita, Sthānaka, Jāti, Puṁliṅga, etc., we have seen in the *Mānasāra*, are repeated in the

same terms and same sense in the *Āgamas*. The most important division, namely, the styles—Nāgara, Vesara and Drāviḍa—is also preserved intact in the latter works. These are purely architectural divisions, consequently they are not taken into consideration in the non-architectural treatises like the *Purāṇas* and the *Bṛihat-Saṁhitā*. Even the broadest division into storeys under which the *Mānasāra* describes the buildings in twelve or thirteen chapters has lost its prominence in the latter works.

Thus the *Mānasāra* has the largest number of the types, namely, 98.

The *Agni-Purāṇa* and the *Garuḍa-Purāṇa* have 45 types each.

The *Matsya-Purāṇa*, the *Bhavishya-Purāṇa*, the *Bṛihat-Saṁhitā*, and the *Kāmikāgama* have 20 types each.

The *Suprabhedāgama* has the smallest number of types, namely, 10.

The technical names of the types of buildings are common in many cases. In some instances the architectural details are identical. The lists of the *Agni-Purāṇa* and the *Garuḍa-Purāṇa* on the one hand, and the *Matsya-Purāṇa*, the *Bhavishya-Purāṇa* and the *Bṛihat-Saṁhitā* on the other, are strikingly similar. Of the works containing the lists of 20 types, the *Bṛihat-Saṁhitā* has the most improved description. But in respect of brevity, explicitness and precision, the *Suprabhedāgama*, which contains the smallest number of types, surpasses all others.

The common names of the types, the identity of their details and the similarity in their description do not seem to be accidental. The grades of the linguistic style and the explicitness and precision of the description are not perhaps unconnected. And the variation in the number of types described in these works does not also seem to be meaningless.

The mutual relation and the historical connexion of these eight works have been discussed in great detail in the chapter on the date of the *Mānasāra* in the writer's *Śilpa-śastra* and the *Hindu Architecture in India and Abroad*.

The object of this article is, however, to show by illustrations the denotation of the term ' Prāsāda.' And before drawing any conclusion, we shall examine briefly a few more literary quotations from works which are not architectural and where the term occurs quite incidentally, as well as from the archaeological records and the Buddhist canonical texts, where too the term is used casually.

(9) *Sāṅkhyāyana-Śrauta-sūtra*, XVI, 18, 13 (*Pet. Dict.*):

Saṁsthite madhyame' hany-āhavaniyam abhito dikshu prāsādān viminvanti ।

(10) *Adbhuta-Brāhmaṇa*, in Indische Studien, 1, 40 (*ibid.*) :

Harmya-prāsāda-saṁkulā ।

(11) 'Prākāra in the *Sāṅkhyāyana-Śrauta-sūtra* (XVI, 18, 14) denotes a walled mound supporting a raised platform (prāsāda) for spectators.' (Professors Macdonell and Keith, *Vedic Index*, II, 44.)

Cf. the text : Tān uparishṭāt samvyādhaiḥ prākāraiḥ parighnanti ।

'Prāsāda in the sense of palace does not occur until the late *Adbhuta-Brāhmaṇa*' (*see* above, no. 10).—(Indische Studien, 1, 40, *Vedic Index*, II, 51.)

(12) *Rāmāyaṇa* (Cock) :

II. 7, 1 : Prāsādaṁ chandra-saṁkāśam āruroha ॥
Ayodhyāṁ mantharā tasmāt prāsādād anvavaikshata ।
II. 7, 12 : Kailāśa-śikharākārāt prāsādād avarohata ।
II. 3, 27 : Prāsādastho daśarathaḥ . . . ।
(Here 'Prāsāda' must mean a palace.)
II. 3, 31 : Sa taṁ kailāśa-śṛingābhaṁ prāsādaṁ . . . raguṇandanaḥ . . . āruroha . . ।
II. 16, 42 : Prāsāda-śṛiṅgeshu ।
VI. 26, 5 : Āruroha . . prāsādaṁ hima-pāṇḍuram ।
Bahu-tala-samutsedham ।
VI. 42, 2 : Ruddhāṁ tu nagarīṁ śrutvā . . . prāsādam . . . ārohata ।
II. 33, 3 : Tataḥ prāsāda-harmyāṇi vimāna-śikharāṇi cha ।
Abhiruhya janaḥ śrīmān udāsīno vyalokayata ॥
II. 33, 4 : Āruhya tasmāt prāsādād dīnāḥ paśyanti rāghavam ।
V. 43, 4 : Āruhya giri-saṁkāśaṁ prāsādam . . . ।
IV. 26, 41 : Tato hema-pratishṭhāne varāstaraṇa-saṁvṛite ।
Prāsāda-śikhare ramye chitra-mālyopaśobhite ॥
Prāṅ-mukhaṁ vidhivan mantraiḥ styāpayitvā varāsane ।
II. 17, 17 : Megha-saṁghopamaiḥ śubhaih . . . ।
Prāsāda-śṛiṅgair vividhaiḥ kailāśa-śikharopamaiḥ ।
IV. 33, 15 : Vānarenda-gṛihaṁ . . . śukla-prāsāda-śikharaiḥ kailāśa-śikharopamaiḥ ।
VI 41, 88 : Prāsāda-śikharaṁ śaila-śṛiṅgam ivonnatam ।
VI. 41, 90 : Prāsāda-śikhareshu ।
II. 51, 21 : Harmya-prāsāda-saṁpannāṁ . . . rāja-dhānīm ।
II. 100, 42 : Prāsādair vividhākārair vṛitām . . . ayodhyām ।
V. 2, 49 : Prāsāda-mālā-vitatāṁ . . . mahā-purīm ।
VI. 39, 21 : Prāsādaiś cha . . . laṅkā parama-bhūshitā ।
VI. 39, 27 : Prāsāda-mālābhir alaṅkṛitāṁ . . . purīm ।
III. 55, 7 : Gṛihaṁ deva-gṛihopamaṁ . . . harmya-prāsāda-saṁbādham ।

III. 55, 10 : Hema-jāla-vṛitāś chāsaṁs tatra prāsāda-paṅktayaḥ ।
V. 6, 44 : Prāsāda-saṁghāta-yutaṁ . . . mahā-gṛiham ।
V. 9, 2 : Bhavanaṁ rākshasendrasya bahu-prāsāda-saṁkulam ।
IV. 33, 8 : Vindhya-meru-prakhyaiḥ prāsādair naika-bhumibhiḥ ।
II. 65, 3 : Rājānaṁ stuvataṁ teshāṁ . . . prāsādāghoga-vistīrṇas tu śabdo hy-avartata।
(*Cf. also* II, 27, 9 ; 57, 18 ; 57, 20.)
I. 80, 19 : Prāsāda-mālā-saṁyuktāḥ . . . niveśāḥ ।
II. 88, 5 : Prāsādāgra-vimāneshu valabhīsu cha sarvadā ।
Haima rājata-bhaumeshu varāstarṇaśālishu ॥
II. 88, 7 : Prāsāda-vara-varyeshu śītāvatsu sugandhishu ।
Ushitvā meru-kalpeshu kṛita-kāñchana-bhittishu ॥
II. 91, 32 : Harmya-prāsāda-saṁyukta-toraṇāni ।
IV. 33, 5 : Mahatīṁ guhāṁ . . . .harmya-prāsāda-saṁbādhām ।
IV. 42, 44 : Bhavanaṁ . . . prāsādaṅgaṇa-saṁbādham ।
VI. 41, 86 : Prāsādaṁ śaila-saṁkāśam ।
(*Cf. also* v, 6, 16 ; 57, 7.)
VI. 75, 7 : Prāsādāḥ parvatākārāḥ । (*cf.* also VI, 75, 6.)
VI. 75, 12 : Muktā-maṇi-vichitrāṁś cha prāsādāṁś cha . . . agnir dahati tatra vai ।
V. 5, 3 : Harmya-prāsāda-saṁbādhām ।
I. 5, 5 : Prāsādair anta-vikṛitaiḥ parvatair iva śobhitām ।

(13) *Mahābhārata* (Cock) :

V. 91, 3 : Tasya (Duryodhana-gṛihasya) kakshāṁ vyatikramya tisro dvāḥ-sthair avāritaḥ ।
Tato abhra-ghana-saṁkāśaṁ gṛiha-kūṭam ivochchhritam ॥
Śrīyāivalambantaṁ prāsādam āruroha mahāśayaḥ ।
I. 3, 133 : Nāga-lokam. . . . aneka vidha-prāsāda-harmya-valabhi-niryūha-śata-saṁkulam ।
I. 109, 9 : Nagaraṁ. . . . prāsāda-śata-saṁbādham, ।
II. 10, 3 : Sabhā. . . . divyā hemamayair uchchaiḥ prāsādair upaśobhitā ।
V. 88, 20 : Etad (Duḥśāsanasya gṛihaṁ)dhi ruchirākaraiḥ prāsādair upaśobhitam ।
V. 89, 11 : Gṛihaṁ (Dhṛitarāshṭrasya). . . . prāsādair upaśobhitam ।
XII. 44, 6 : Duryodhana-gṛihaṁ prāsādair upaśobhitam ।
XII. 44, 8 : Prāsāda-mālā-saṁyuktaṁ (Duḥśāsanasya gṛiham) ।

I. 185, 19, 20, 22 : Sarvataḥ saṁvṛitaḥ (samājavāṭaḥ) śubhraiḥ prāsādaiḥ sukṛitochchhrayaiḥ ।
Suvarṇa-jāla-saṁvṛitair maṇi-kuṭṭima-bhūshaṇaiḥ ।
Sukhārohaṇa-sopānair mahāsana-parichchhadaiḥ ॥
Asaṁbādha-śata-dvāraiḥ śayanāsana-śobhitaiḥ ।
Bahu-dhātu-pinaddhāṅgair himavach chhikarair iva ॥

V. 90, 14 : Ye . . . prāsādāgreshv-abodhyantarāṅka-vājina-śāyinaḥ (Pāṇḍavāḥ) ।

XV. 16, 1 : Prāsāda-harmyeshu vasudhāyāṁ cha. . . . ।
Nāriṇāṁ cha narāṇāṁ cha niḥsvanaḥ sumahān abhūt ।

XIV. 25, 22 : Seyaṁ bhūmau pariśrāntā śete prāsāda-śāyinī ।
Prāsāda-śālā-saṁbādhaṁ maṇi-pravara-kuṭṭimam ।
Kārayāmāsa vidhivad-dhema-ratna-vibhūshitam ।

(14) *Manu-Saṁhitā* (VII, 147, etc.) :
Giri-pṛishṭhaṁ samāruhya prāsādaṁ vā raho gataḥ ।
Araṇye niḥśalāke vā mantrayed avibhāvitaḥ ॥

(15) *Pañchatantra* (Bombay, 1, p. 38, etc.) :
Rājakanyāṁ. . . . sapta-bhūmika-prāsāda-prānta-gatām ।

(16) *Hitopadeśa* (*Bohtlingk*, p. 157, 1, 30, etc.) :
Rājā . . . prāsāda-garbhaṁ gatvā. . . . . ।
Prāsāda-pṛishṭhe-sukhopavishṭānāṁ rāja-putrāṇām ।

(17) *Megha-dūta* (ed. Stenzler, 64, etc.) : Abhraṁ-lihāgraiḥ prāsādaiḥ ।

(18) *Raghu-vaṁśa* (14, 29, etc.) : Prāsādam abhraṁ-liham āruroha ।

(19) *Mṛichchha-kaṭika* (ed. Stenzler, Cock) :
p. 79 : Ārāma-prāsāda-vedikāyām ।
p. 84 : Vidyut-kāñchana-dīpikeva rachitā prāsāda-saṁchāriṇī ।
p. 21, 132, 162, 164 : Prāsāda-bālāgram ।

(20) *Rājatarāṅgini* (*Pet. Dict.*, 4, 102, etc.) : Prāsādāṅganam ।

(21) Ekas tayor amum akārayad indu-mauleḥ prāsādam adri-tanayā bhavanaṁ tathānyā—'the one of them built this temple of the god who wears the moon on his head, and the other that of the Daughter of the Mountain.'—(Dewal Praśasti of Lalla the Chhinda, v. 27, *Ep. Ind.*, VOL. I, pp. 80, 84.)

(22) Ishṭāpūrtta-prachura-sukritārambha-nityādṛitena prāsādo'yaṁ . . . nirmāpyate—'he caused this edifice to be erected . . . in it there is here the god Nārāyaṇa.'—(Mau-chandella inscrip. of Madana-varman, v. 46, *Ep. Ind.*, Vol I, pp. 202, 206.)

(23) Prāsādena tavāmunaiva haritām adhvā niruddho mudhābhāno'-dyāpi kṛito'sti dakshiṇadiśaḥ koṇāntavāsī muniḥ ।—(Deopara inscrip. of Vijaya Sena, v. 27, *Ep. Ind.*, Vol. I, pp. 310, 314.)

(24) Akārayat svayṁ Śambhu-prāsādāli-dvayaṁ nijaḥ—'She too made her people construct that hall of study (and) lay out that long line of gardens in two ranges (adjoining Śambhu's temple).—(Bhera-ghat inscrip. of Alhanadevi, v. 38, *Ep. Ind.*, Vol. II, pp. 13, 16.)

(25) Aneka-prāsādaiḥ parivṛitamati prāṁśukalaśaṁ giriśaprāsādaṁ vyarachayat।—(Chitorgadh inscrip. of Mokala of Mewad, Part II, v. 2, *Ep. Ind.*, Vol. II, p. 421.)

(26) Vāpi-kūpa-tāḍāga-kuṭṭima-maṭha-prāsāda-satrālayān।

(Śrīdhara's Devapattana Praśasti, v, 10, *Ep. Ind.*, Vol. II, p. 440.)

(27) Mahā-śaila-prāsāda—great stone temple.—(Pattadakal inscrip. of Kirtivarman II, lines 7, 11, 14, *Ep. Ind.*, Vol. III, pp. 4, 5.)

(28) Ghanaṁ prāsādaṁ nava-hema-kumbha-kalitaṁ ramyaṁ mahāmaṁṭapaṁ।

'(He presented) a solid temple (prāsāda) adorned with nine golden pinnacles (kumbha) and a beautiful large hall (to the temple of Hari, the lord of Maṅgalaśaila).—(Maṅgalagiri Pillar inscrip., v. 51, *Ep. Ind.*, Vol. VI, pp. 125, 115.)

(29) Prāsādo rachitas sudhā-chchhavi-hasat-kailāśa-śaileśvarasya, (v. 22), prāsādam Īśasya (v. 32), prāsāda-kīrttiḥ (v. 34).—(Two Bhuvaneśvara inscrip. no. A of Svapneśvara, *Ep. Ind.*, Vol. VI, p. 202.)

(30) Prāsādaṁ navabhiś cha hema-kalaśair aty-unnataṁ gopura-prākārotsava-maṁṭapair upachitaṁ śrī-rāma-bhadrāya cha—'an exceedingly high temple furnished with nine gilt domes, a gate tower, a wall and festive hall, to the holy Rāmabhadra.'—(Kondavidu inscrip. of Krishnaraya, v. 27, *Ep. Ind.*, Vol. VI, pp. 237, 231.)

(31) Khaṇḍa-sphuṭita-prāsāda-puṇaḥ-saṁskaraṇārthaṁ pratipāditaḥ—'he granted for defraying the expenses of the repairs of the temple broken in parts.'—(Plates of Dantivarman of Gujarat, line 67, *Ep. Ind.*, Vol. VI, pp. 293, 286.)

(32) Tena bhrāṭṛi-yugena yā prati-pura-grāmādhva-śaila-sthalaṁ vāpi-kūpa-nipānakā saraḥ prāsāda-satrādikā।

Dharmma-sthāna-paraṁparā nava-tarā chakre'tha jīrṇṇoddhṛita-tat-saṁkhyāpi na budhyate yadi paraṁ tad-vedinī medinī।

(Mount Abu inscrip. no. I, v. 66, *Ep. Ind.*, Vol. VIII, p. 213.)

(33) Tīrthe deva-hrade tena kṛitaṁ prāsāda-pañchakam।
Svīyaṁ tatra dvayaṁ jātaṁ yatra śaṁkara-keśavau॥

(Sihawa stone inscrip. of Karnaraja, v. 9, *Ep. Ind.*, Vol. IX, p. 186.)

(34) Śrī-nemiśvarasya nirākṛita-jagad-vishādaḥ prāsādaḥ samuddadhre —'Erected the temple of Nemīśvara which (temple) has removed the sorrows of the world.'—(The Chahamanas of Marwar, no. xxv, Nādlāi stone inscrip. of Raṇaviradeva, line 15 f., *Ep., Ind.*, Vol. xi, p. 64.)

(35) Esha bhagavato varāha mūrtter jagat-parāyaṇasya nārāyaṇasya
śilā-prāsādaḥ sva-vishayc'sminn Airikiṇe kāritaḥ ।

'This stone temple of the divine (god) Nārāyaṇa, who has the form of a boar (and) who is entirely devoted to (the welfare of) the universe, has been caused to be made in this in his own vishaya of Airikiṇa.'—(Eran stone Boar Inscrip. of Toramana, line 7, *C. I. I.*, Vol. iii, F. G. I., no. 36, pp. 160, 161.)

(36) Nānā-dhātu vichitre gopāhvaya-nāmni bhū-dhare ramye kāritavān śaila-mayaṁ bhānoḥ prāsāda-vara-mukhyam ।

'Has caused to be made, on the delightful mountain which is feckled with various metals and has the appellation of Gopa, a stone temple, the chief among the best of temples of the Sun.'

Tāvad giri-mūrdhni tishṭhati śilā-prāsāda-mukhyo ramye—'so long (this) chief of (stone)-temples shall stand upon the delightful summit of the hill.'—(Gwalior stone inscrip. of Mihirakula, lines 6, 8, 9 ; *C. I. I.*, Vol. iii, F. G. I., no. 37, pp. 162, 163, 164.)

(37) Tenochchair bodhimaṇḍe śaśi-kara-dhavalaḥ sarvvato maṇḍapena ।
Kāntaḥ prāsāda esha smara-bala-jayinaḥ kārito loka-śāstuḥ ॥

'By him this beautiful mansion of the Teacher of mankind, who overcame the power of (the god) Smara, dazzling white as the rays of the moon with an open pavilion on all sides, has been caused to be made at the exalted Bodhimaṇḍa.'

Bodhimaṇḍa is also called Vajrāsana, the throne under the Bodhi-tree at Bodh-Gaya, on which Buddha sat when attaining Bodhi or perfect wisdom. The word 'Kānta' here might have a technical architectural meaning. In the *Mānasāra*, the names of the buildings of various storeys generally end with 'kānta,' e. g., meru-kānta, hima-kānta, etc. ; so also the names of the columns, e.g., Brahma-kānta, Vishṇu-kānta, etc.—(Bodh-Gaya inscrip. of Mahanaman, lines 10, 11, *C. I. I.*, Vol. iii, F. G. I., no. 71, pp. 276, 278, 275, and Sanskrit and Old Kanarese inscrip. no. 166, Bodh-Gaya inscrip. of Mahanaman, line 10 f., of A. D. 588, 589, *Ind. Ant.*, Vol. xv, pp. 358, 359, 357, c. 1, para. 2.)

(38) Adbhutaḥ simha-pāniya-nagare yena kāritaḥ ।
Kīrtti-stambha ivābhāti prāsādaḥ pārvvatī-pateḥ ॥

'In the town of Simhapāniya he caused to be built a wonderful temple of the Lord of Pārvatī, which shines like a column of fame.—(Sasbahu incrip. of Mahipala, v. 11, *Ind. Ant.*, Vol. xv, pp. 37, 42.)

(39) Sa prāsādam achīkarad divishadāṁ kedāra-devasya cha ।

'He caused to be built a temple of the inhabitants of heaven and of the god Kedāra.'—(Gaya inscrip. of Yakshapala, v. 12, *Ind. Ant.*, Vol. xvi, pp. 65, 66.)

(40) Vejaṁto pāsāde (prāsāda)—'Vaijayanta, the palace (of Indra).'—(Bharaut inscrip. no. 79, *Ind. Ant.*, Vol. xxi, p. 233.)

(41) Nāyaka-śrī-hari-rāja-devo Ha(hā)ṭakeśvarasya prāsādaṁ kṛitam—'The temple of Hāṭakeśvara (Śiva) was founded by Nāyaka (leader) the illustrious Harirāja.'—(Nāgpur Museum stone inscrip. of Brahmadeva of Rāyapura, lines 9–12, *Ind. Ant.*, Vol. xxii, p. 83.)

(42) Mahā-lakshmī-deviya prāsādavam geyada Viśvakarmma-nirmmiṭa-subhāsitan—'built the temple of the goddess Mahālakshmī, as if a creation of Viśvakarmma.'—(*Ep. Carnat.*, Vol. v, Part I, Hasan Taluq, no. 149, Roman Text, p. 86.)

The above-mentioned inscription (dated conjecturally A. D. 1113) ends with the following passage apparently quoted from a book for sculptors and architects (gṛiha-vāstu) :

'Vimāna-sarvvato-bhadra-vṛishabha-naliṇika-uttuṅga-virāja-garuḍa-varddhamāna-śaṅkha-vṛitta-pushpaka-gṛiha-rāja-svasti.'

(*Ibid.*, Text, p. '9, last 3 lines.)

(43) Prāsāda-mālābhir alaṁkṛitāṁ dharāṁ vidāryyaiva samutthitam ।
Vimāna-mālā-sadṛiśaṁ yattra gṛihaṁ pūrṇṇendu-karāmalam ॥

'Here cleaning as under the earth, there rise up houses which are decorated with succession of storeys; which are like rows of aerial chariots (and) which are as pure (white) as the rays of the full moon.'—(Mandasor stone inscrip. of Kumaragupta, line 7, *C. I. I.*, Vol. iii, F. G. I., no. 18, pp. 81, 85.)

(44) Svargārthaṁ kṛitavān pratāpa-nṛipatiḥ sadyoshito-retayoḥ prāsādaṁ vasu-patra-padma-sadṛiśaṁ śriṅgāshṭakaiḥ śobhitam ।

The inscription is 'on a slab in the wall near the southern door of a temple of Vishṇu close to the royal palace in Kāṭmaṇḍu. This temple is apparently the building mentioned in the inscription (quoted above). It is an octagon, and has three storeys.'

The plan of the temple is like a lotus of eight leaves (Vasu-patra-padma-sadṛiśa).—(Inscrip. from Nepal, no. 18, inscrip. of Pratāpamalla, v. 10, *Ind. Ant.*, Vol. ix, pp. 188, 187, 189, c. 2, para 2.)

(45) Dig-bhāgāntara-sanniveśita-chatur dvāraḥ sukhāroḥaṇaḥ paśchād ramya-suvarṇa-ketana-tala-nyasta-tri-śūlo'ntaraḥ ॥
Sauvarnojjvala-kumbha-patra-paṭala-prodbhāsitāśā-mukhaḥ prāsādo. diśatād abhīpsita-sadāvāsa-prasakto mudaḥ ॥

(Inscrip. from Nepal, no. 23, *Ind. Ant.*, Vol. ix, p. 194.)

(46) Grāma-nagara-kheḍa-kharvaḍa - maḍaṁba-droṇamukha-paṭṭaṇaṁgaliṁdam aneka-māṭa-kuṭa-prāsāda-devāyatanaṁgali-dam oppuva-agrahāra-paṭṭaṇaṁgaliṁdam atisayavappa . . .।

'At Teridaḷa, a merchant town situated in the centre and the first in importance among the twelve (towns) in the glorious Kuṇḍi Three Thousand, adorned with—villages, towns, hamlets, villages surrounded by hills, groups of villages, sea-girt towns and chief cities, with elegant mansions, palaces and temples, and with shining agrahāra towns in the country of Kuntala.'—(Old Canarese inscrip. at Terdal, line 58, *Ind. Ant.*, Vol. XIV, pp. 19, 25.)

(47) 'Prāsādaṁ Keśavasya sphuṭa-ruchi-kalaśenāñchayat kāñchanena 1309'

'Prāsādaṁ Keśavasya sthira-kalaśa-yutaṁ kārayāmāsa divyaṁ 1659'।

'Prāsādaṁ Keśavasya sthira-kalaśa-yutaṁ Najñayāryo vyatānit 1697'।

Mr. Rice has translated 'prāsāda' in all these three instances by 'tower', although the term means primarily temple here.—(*Ep. Carnat.*, Vol. v. Part I; Belur Taluq, nos. 63, 64, 65 ; Roman Text, pp. 135, 136; Transl., p. 59.)

(48) 'Causing a tower (prāsāda), decorated with carvings and figures (chitra-vichitra-patra-nūtamam prāsādamaṁ), to be erected of stone, and a golden kalaśa to be made for the pinnacle of the temple (devālayāgrake), he in many ways increased his fame in the world.'—(*Ep. Carnat.*, Vol. VII, Shikarpur Taluq, no. 242 ; Transl., p. 139, para. 6 ; Roman Text, p. 247, last four lines.)

(49) Kāśyāṁ viśveśvara-dvāri hima-diśi kharopamam।
Padmeśvarasya devasya prāsādam akarot sudhīḥ।

'On the north side of the entrance to the Viśveśvara temple at Kāśī built a solid and lofty temple of the god Padmeśvara (Vishṇu)' on A. D. 15th May, 1296.—(*Sharqi Arch. of Jaunpur*, inscrip. no. XXVI, v. 3, *Arch. Surv.*, New Imp. Series, Vol. I, p. 51.)

(50) Vāpi-kūpa-taḍāga-kuṭṭima-maṭha-prāsāda-satrālayān।
Sauvarṇa-dhvaja-toraṇāpaṇa-pura-grāma-prapā-maṇḍapān।
Vyadhāpayad ayaṁ chaulukya-chūḍāmaṇiḥ।

(Sridhara's Devapattana Praśasti, v. 10, *Ep. Ind.*, Vol. II, p. 440–441.)

(51) In the Buddhist literature buildings are divided into five classes (pañcha-lenāni)—vihāra (monastery), ardha-yoga (stated by the commentator Buddhaghosa to imply 'suvārṇa-vaṅga-gṛiha,' a type of two-roofed buildings, partly religious and partly residential), prāsāda (wholly

residential storeyed buildings), harmya (larger type of storeyed buildings), and guhā (underground buildings).—(Vinaya Texts, *Mahāvagga* I, 30, 4, p. 73–74 : *Chullavagga*, VI, 1, 2, p. 158.)

The commentator Buddhaghosa does not explain 'prāsāda' quoted above from the Vinaya Texts; he simply says 'prāsādo iti dīgha-pāsādo.' According to Rhys Davids 'prāsāda' is 'a long-storeyed mansion, or the whole of an upper storey, or the storeyed buildings' (*cf.* his transl. of *Mahāvagga*, p. 173; *Chullavagga*, p. 151, note 2). Sir M. William seems to explain (in his dictionary) this 'prāsāda' by 'the monks' hall for assembly and confession.'

Cf. satta-bhūmika-prāsāda—'buildings of seven storeys in height.'

(*Jātaka*, I, pp. 227, 346 ; V, pp. 52, 426 ; VI, p. 577.)

From the illustrations given above, it is clear that the term 'prāsāda' implies both religious and residential buildings. It denotes the gorgeous temples as well as small pavilions (maṇḍapa) where a deity or the emblematical phallus of Śiva is installed. It includes magnificent palaces and smaller residences. It implies a succession of storeys, and a tower, 'a lofty seat or platform for spectators, a building erected on high foundations and approached by means of steps, a building consecrated to a deity or inhabited by a prince, a temple, a palace, and the assembly room and confessional hall of the Buddhist priesthood.'

PRĀSĀDA-TALA—Floor, roof.

(*Buddhist Suttas*, by Rhys Davids, p. 262.)

PRĀSĀDA-MĀLIKĀ—A class of buildings.

(*Kāmikāgama*, XLV, 4; *see* under MĀLIKĀ.)

PRIYA-DARŚANA—One of the five Indian orders.

(*Suprabhedāgama*, XXXI, 65, 67 ; *see* under STAMBHA.)

PREKSHĀGĀRA—An amphitheatre.

Śata-kumbhamayaṁ divyaṁ prekshāgāram upāgatam I

(Mbh. Ādiparvan, *see* under RAṄGA and compare *Bharata Nāṭya-śāstra*, 11, 7, 13, 25).

PREKSHĀ-GṚIHA(-MAṆḌAPA)—Auditorium in a theatre, the front room or pavilion facing a shrine wherefrom the deity is seen.

(*Ibid.*, II, 7, 13.)

In theatre proper it should be semi-circular, quadrangular and triangular :

Prekshā-gṛihāṇāṁ sarveshāṁ tri-prakāro vidhiḥ smṛitaḥ I
Vikṛishṭaś-chaturaśraś-cha tryaśraś-chaiva prayukṛibhiḥ II

(*Ibid.*, II, 25.)

In large theatres, attached to temples it should be semi-circular, in middle-sized ones attached to palaces it should be quadrangular, and in ordinary small theatres for the general public it should be triangular.—(*Bharata Nāṭya-śāstra*, II, 26.)

Iha prekshā-gṛihaṁ dṛishṭvā dhīmatā viśvakarmaṇā ।
Trividhaḥ sanniveśaścha Śāstrataḥ parikalpitaḥ ॥
Vikrishṭaś-chaturasraś-chaiva tu maṇḍapaḥ ।—(*Ibid.*, II, 7–8.)

PREKSHA-NIVEŚANA—The auditorium of a playhouse (*Bharata Nāṭya-śāstra*). *See* details under NĀṬYAGṚIHA.

PROSHṬHA—A high and broad bench with moulded and turned legs (*R.-V.*, VII, 55, 8; *A.-V.*, IV, 5, 3; *Taitt. Brā.*, II, 7, 17, 1), long timber seats fixed against walls, combinations of a settee and a coffer.

PLAKSHA-DVĀRA—A back-door, a side-door, a private entrance. (*Matsya-Purāṇa*, Chap. CCLXIV, v. 15; *see* under UDUMBARA.)

PH

PHAṆA—A hood in connexion with the joinery.

(*M.*, XVII, 134; *see* SANDHI-KARMAN.)

PHALAKĀ—A plank, a moulding, an architectural member, the abacus, a leaning board.

(*Mahāvagga*, V, 10, 2.)

(1) A plank: *cf.* pralamba-phalakā (*M.*, XII, 125).
A member of the column (*M.*, XV, 50, 51, 83, 185, etc.).
In connexion with the arch (toraṇa):

Nāṭikā phalakā mushṭi-bandhanaṁ patra-vallikam ।

(*M.*, XLVI, 65.)

(2) *See also M.*, L, 66, 74; LXV, 161, 162; LXVII, 16, etc.

Pādāshṭāṁśa-shaḍ-aṁśaika-phalakaiś chhādayet paritaḥ ॥
Kāya-pādāntaraṁ chhādyaṁ phalakaiḥ sāra-dārujaiḥ ॥

(*Kāmikāgama*, LIV, 24, 30.)

(3) A part of a column (*Suprabhedāgama*, XXXI, 58; *see* under STAMBHA).

PHALAKĀSANA—A synonym of the bedstead.

(*M.*, III, 11; *see* under PARYAṄKA.)

PHĀLA-PAṬṬA—Front plate, a plough-share-like moulding.

(*M.*, XLIX 93.)

PHELĀ (*cf.* CHHELĀ)—The vault of the foundation pit.

(*Kāmikāgama*, XXXI, 74–75; *see* under CHHELĀ.)

B

BANDHA—Joining or folding together, a band, the foundation.

Dvāv-aratnīṁ tri-padīṁ vā pāde bandhaṁ kārayet—'Foundation shall be 2 aratnis by 3 pādas.'—(*Kauṭilīya-Artha-śāstra*, Chap. LXV, p. 166.)

BA(VA)LĀNAKA—A raised platform or seat along the wall of the council hall of a temple.

Tejaḥ-pāla iti kshitiṁdu-sachivaḥ śaṁkhojjvalābhiḥ śilā-śreṇibhiḥ
sphurad-iṁdu-ruchiraṁ nemi-prabhor maṁdiram ।
Uchchair maṁḍapam agrato jina-(vara)-vāsa-dvipaṁ chāśataṁ
tat-pārśveshu balānakaṁ cha purato nishpādayāmāsivan ।

It 'apparently is identical with Marāṭhi balāṁ which according to the Dictionary of Molesworth and Candy means a raised seat along the walls of the gābhārā or Sabhā-maṇḍapa of a temple.' Dr. Lüders.—(Mount Abu inscrip. no. 1, v. 61, *Ep. Ind.*, Vol. VIII, pp. 212, 200.)

BALI(-I)KĀ(-A)—A moulding of the entablature, the edge of a roof.

Mahā-bhāra-tulā-kāryā balikordhve viśeshataḥ ॥
Tulā-balikayor madhye dvi-daṇḍam athavā punaḥ ॥
Haṁsa-bhūta-balir vātha nidrā vā daṇḍa-mānataḥ ।
Tri-pādodaya-yuktā vā vidheyā vājanopari ॥

(*Kāmikāgama*, LIV, 13, 16, 20.)

BALI-PĪṬHA-(KA)—The seat of sacrifice, an altar for offerings.

(1) Bṛishabhasyopari-bhāge tu kalpayed bali-pīṭhakam ।
Gopurasya bahir vāpi sthāpayed antar vāpi bali-pīṭhakam ।
Antar maṇḍala-deśe tu pūrvavat bali-pīṭhakam ।

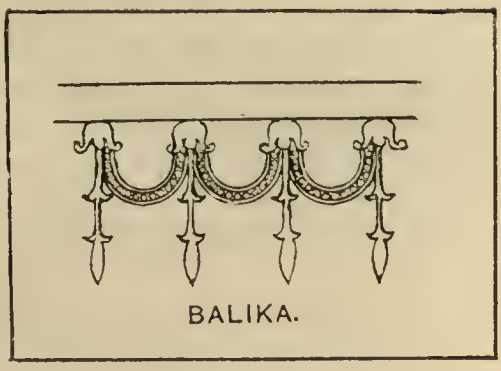
(*M.*, XXXII, 99, 100, 133.)

(2) Śrīmat-saundara-pañcha-rātra-vidhiyiṁ nirmāṇamaṁ mādisi ।
Śrīmantaṁ bali-pīṭhamaṁ pramudadiṁ viprārggalam mādisi ॥

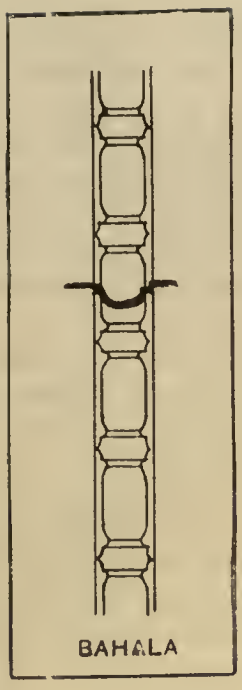
'Caused a bali-pīṭha to be erected according to the rule of the (*Śilpa-śāstra*) Pañcharātra.'—(*Ep. Carnat.*, Vol. V, Part 1, Belur Taluq, no. 8; Roman Text, p. 105; Transl., p. 46.)

(3) 'There he enlarged the Kalideva-maṇṭapa, and re-established the bali-pīṭha.'—(*Ep. Carnat.*, Vol. V, Part I, Arsikere Taluq, no. 22; Transl., p. 119, largest para., last line.)

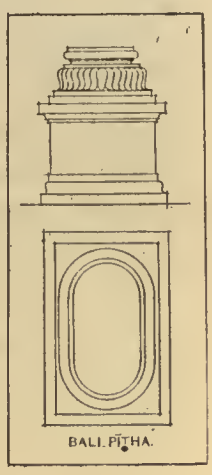
(4) 'There are also fragments (of inscriptions) belonging to the time of Rājarāja I, and Rajendra-Chola I, on a maṇḍapa to the west of the bali-pīṭha.'—(Notes on Tiruvellarai inscrip., *Ind. Ant.*, Vol. XXXIV, p. 264, para. 5, line 10 f.)



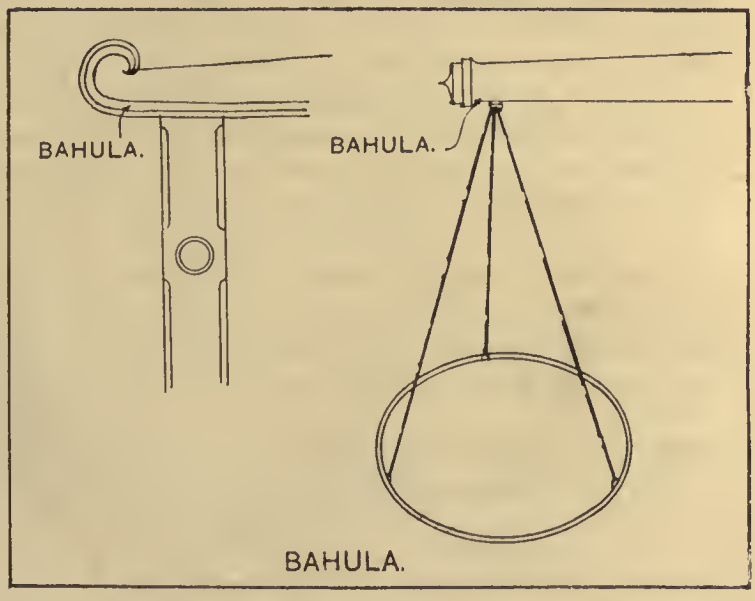
BALIKA.



BAHALA



BALI PĪTHA.



BAHULA.

(5) 'Haridāsa-Rāūta, . . . set up in front of the god Prasanna-Mādhava of Belur, a festival (utsava) maṇṭapa, a pillar for lights (dīpa-māleya-kambha), and an altar for offerings (ballī-piṭha, i.e., bali-pīṭha).'—(*Ep. Carnat.*, Vol. IV, Nāgamaṅgala Taluq, no. 42 ; Transl., p. 124; Roman Text, p. 213.)

BASADI (*see* VASATI)—A Jain temple, a shrine, a monastery, modern Basti or slum quarters.

(1) Kadalalāya-basadi—Jaina temple of the Jaina goddess Kadala-lāya.—(Anmakonda inscrip. of Prola, v. 9, *Ep. Ind.*, Vol. IX, pp. 262, 257.)

(2) 'And on the top of the rock to the south of the Badra tank of that mountain, Ganeyana Māra had the Pārśva-Jina vasati erected. This Jogavaṭṭige basadi, may it endure as long as sun and moon, protected by the pañcha-mahā-śabda (five words for Jain obeisance), and by unnumbered others.'

'Basadi' in the sense of Jaina temple is of frequent use in the volumes of *Ep. Carnat.* Its Sanskrit form is, of course, 'vasati' an instance of which should be noticed in the passage quoted above.—(*Ep. Carnat.*, Vol. XII, Pavugada Taluq, no. 52 ; Transl., p. 125, line 2 ; Roman Text, p. 206 f.)

(3) 'Being actuated by veneration, gave to the basadi of the Bhaḷārar . . . five mattars (of land).'

'Basadi (means) a Jain temple; the word is a Tadbhava corruption of the Sanskrit "vasati," abode, dwelling, a Jain monastery; the modern form is "Basti".' Dr. Fleet.—(Sanskrit and Old Kanarese inscrip., *Ind. Ant.*, Vol. IV, p. 181, c. 1, line 10, and footnote.)

(4) Purigeṛeyalu mādisid-Ānesejjeya-basadige . . .

'In the lands of Guḍigere, which . . . were under the control of the Jain temple called Ane sejjeya. . . . built at Purigeṛe.'—(Guḍigere Jain inscrip., line 21, *Ind. Ant.*, Vol. XVIII, pp. 39, 37.)

See Ep. Carnat., Vol. II, inscriptions (i) on Chandra-giri, nos. 1–74, (ii) on Vindhya-giri, nos. 75–123; and (iii) in the town, nos. 124–144.

(5) 'Caused basadis and māna-stambhas to be erected in numerous places.'—(No. 38, Roman Text, p. 7, line 17 ; Transl., p. 121, line 5.)

(6) 'The basadi of his guru Śrī-rūpa-nārāyaṇa of Kollāpura.'—(No. 39 ; Roman Text, p. 7–8 ; Transl., p. 122, line 18.)

(7) 'The basadis of Gaṅga-vāḍi, however, many there were, he restored.'—(No. 45 ; Roman Text, p. 21 ; Transl., p. 126, line 12.)

(8) 'This Lakshmī, wife of Gaṅga senā-pati, the abode of all good qualities, had this new Jina temple (vasati) made.'—(No. 63 ; Roman Text, p. 59; Transl., p. 149.)

(9) 'The Daṇḍanāyaka Gaṅga had this basadi made for his mother Pochavue.'—(No. 64 ; Roman Text, p. 59 ; Transl., p. 149.)

(10) 'The bastis (basadinal) of Gaṅga-vāḍi, however many there were, he had renewed.'—(No. 90; Roman Text, p. 72, line 10 from bottom upwards; Transl., p. 158, para. 5.)

(11) 'He had these images of Bharata and Bāhubali Kevali, the basadis, and the side-doors of that tīrtha made for beauty; . . . having erected eighty virgin (? new) basadis, and repaired two hundred (that were in ruins), he obtained glory, the general Bharata.'—(No. 115; Roman Text, p. 87; Transl., p. 171.)

(12) 'He built a small basti on the lower hill; repaired three bastis at the north gate, (and) the Maṅgāyi basti, repaired the Hagalaya (a village to the south of Śrāvana Belgola)-basti, and made gifts for supplying food in one.'—(No. 134; Roman Text, p. 100; Transl., p. 179.)

(13) 'And in Kellaṅgere he (also) made five large bastis and five beautiful ponds.'

'The money obtained from this place will be used for repairing the Ārchāri's and other dwelling and the basadis, for the worship and decoration of the god, and for gifts, of food to the people visiting the basadi and to the assembly of Rishis.'—(No. 137*a*; Roman Text, p. 104, lines 6, 9; Transl., p. 182, paras. 5, 11.)

(14) 'Keep whatever you have obtained from the paddy lands and dry fields, together with the waste land, the firewood, leaves, decay of the basadi house and so forth, belonging to the endowments of Gommaṭa deva, Kamaṭha Pārśva deva, Śrī-vallabha deva of Bhaṇḍāraiya's basadi, and principal basadis.'—(No. 137*c*.; Transl., p. 183.)

(15) 'And for the basadi which he had made . . . a small tank east of the basadi . . .'—(No. 144; Transl., p. 187, line 9 from bottom upwards.)

(16) 'He made a grant of lands for the basadis of the Tri-kūṭa-basadi which he had caused to be erected in Arakoṭṭāra in the Enne-nād.'—(*Ep. Carnat.*, Vol. IV, Chāmarājnagara Taluq., no. 83; Transl., p. 10.)

(17) 'He caused a basadi to be erected in Muguli in Sige-nād, and setting up therein the god Pārśva, presented the basadi and land for the god to their guru.'

In this instance, it should be noted, the meaning of 'basadi' as a Jaina temple is unquestionable.—(*Ep. Carnat.*, Vol. V, Part I, Hasan Taluk, no. 129; Transl., p. 36.)

(18) 'Hoysaḷa-Gavuṇḍa, son of . . . in memory of his mother's death, erected a basadi, and in the presence of all the residents and farmers of the town, divided certain land (specified) equally to the basadi and the temple (basadigaṁ devālyakkam bhūmi samāna-vāgi basadige . . .), washing the feet of Ahobala-Paṁḍita.'

The distinction made here between the basadi and the temple (devālaya) should be noted.—(*Ep. Carnat.*, Vol. IV, Kadur Taluq, no 69; Transl., p. 13, para. 5; Roman Text, p. 45, last para., line 4 f.)

(19) 'Thus celebrated, Barmma-Deva, the Bhujabala-Gaṅga Permmāḍi-Deva, made the basadi, which Daḍiga and Mādhava had formerly established on the hill of Mandali, and for which the kings of his Gaṅga line had continued to provide the offerings, and which they had afterwards caused to be built of wood, the chief of all the basadis hitherto existing or in future to be established in the Eḍadore-seventy of the Maṇḍali-Thousand, giving it the name of Paṭṭada-basadi (the Crown-basadi), and endowed it with certain lands (specified).'—(*Ep. Carnat.*, Vol. VII, Shimoga Taluq, no. 4; Transl., p. 8, para. 4.)

(20) 'The great minister, . . . , enlarged a tank, formed paddy fields erected a temple, and established places for distribution of water and food. And the basadi he built shone with big tank of Taṭṭekere surrounding it.'

'And for those two basadis of Nellavatti and Taṭṭikere, on the death of Jinadāsa as a reward of perggaḍe Nokkayya's boldness and liberality, Gaṅga-Permmāḍi-Deva granted the royal insignia of two horns, a canopy, chāmaras, and big drums.'

'And Gaṅga-permmāḍi-deva granted for the basadi the shop-tax and customs of Taṭṭikere.'—(*Ep. Carnat.*, Vol. VII, Shimoga Taluq, no. 10; Trans p. 11, last two paras., p. 12, paras. 2, 3.)

(21) 'For the maṭhādhipati of Bandaṇike was erected a maṇṭapa in front of the Śānti-Jina basadi.'—(*Ep. Carnat.*, Vol. VII, Shikarpur Taluq, no. 228; Transl., p. 133; Roman Text, p. 232.)

(22) See both 'basti' and 'basadi' (in *Ep. Carnat.*, Vol. III, Seringapatam Taluq, nos. 144, 146, etc.; Transl., p. 34 and also in other volumes of *Ep. Carnat.* referred to above) and the sketches of bastis between pp. 50, 51 (Introduction, *Ep. Carnat.*, Vol. II), and pp. 150, 151 (Translation), and compare the following from Fergusson:

'The principal group of the bastis of the Jains at present known at least above the ghāts, is that of Śrāvana Belgola. There are there wo hills—the Indragiri, on a shoulder of the other, called Chandragiri, stand the bastis, fifteen in number. As might be expected from the situation, they are all of the Dravidian style of architecture, and are consequently built in gradually receding storeys, each of which is ornamented with small simulated cells. . . . No instance occurs among them of the curvilinear sikra (śikhara) or spire, which is universal with the northern Jains, except in the instance of Ellora.'

'The following wood-cut (photo no. 149) conveys, however, an idea of the general external appearance, which is more ornamental than that of northern Jain temples. The outer wall of those in the north is almost always quite plain. The southern ones are as generally ornamented with pilasters and crowned with a row of ornamental cells. Inside is a court probably square and surrounded by cloisters, at the back of which rises the vimāna over the cell, which contains the principal image of the Tīrthankar. It always is surmounted by a small dome, as is universally the case with every vimāna in Dravidian architecture, instead of with the mysterious amalaka ornament of northern sikras (śikharas).'

'It may be a vain speculation, but it seems impossible to look at this wood-cut (no. 149), and not to be struck with its resemblance to the temples of southern Babylonia. The same division into storeys with their cells; the backward position of the temple itself; the panelled or pilastered basement, all these points of resemblance, it seems difficult to regard as purely accidental.'—(Fergusson : *Ind. and East. Arch.*, pp. 269–270.)

BA(VA)SUNDHARĀ—The earth, a type of pent-roof.

(*M.*, XVIII, 177 ; *see* under LUPĀ.)

BAHALA (*see* BĀHULYA)—An extension, a projection, a sugar-cane-like moulding.

(1) Dvāra-tāre chatush-pañcha-shaṭ-saptāshṭa-vibhājite ॥
Ekāṁśa(ṁ) sūtra-paṭṭih syāt samaṁ vā bahalaṁ bhavet ।
Ardhaṁ vā pāda-hīnaṁ vā bahalaṁ parikīrtitam ॥ (2)
Śilayā cha mṛidā py-athavā taruṇā rachayed atha kuḍyam atīva-dṛiḍham ।
Tad ihottara-vistarataḥ sadṛiśaṁ bahalaṁ kathitaṁ talipādi-yutam ।
(*Vastu-vidya*, ed. Ganapati Śāstri, XIV, 1, 2 ; XV, 1.)

(2) In connexion with a pillar :
Ashṭāṁśaṁ yoga-vistāraṁ tad-ardhaṁ bahalaṁ bhavet ।
(*M.*, XXXIX, 59.)

(3) Stambha-vyāsa-samo(-maṁ) vā tad-ardhaṁ bahalaṁ (? bahu laṁ) bhavet ॥
Kavāṭa-bahulaṁ proktaṁ daṇḍārdhaṁ vā ghanaṁ bhavet ॥
(*Kāmikāgama*, LV, 35, 38.)

It is clear from v. 38 that ghana or thickness is not to be confused with bahala or bahula.

BAHIR-AṄGA—The outer court, the external side of a building.

Athavā bahir-aṅge tu cheshṭa-dig-vishṇor ālayam ।
Anyeshāṁ sarva-liṅgānāṁ nagarāt bahir-aṅgataḥ ।
(*M.*, IX, 257, 402.)

BAHIR-JANMAN—The outer plinth (*see M.*, LXIX, 16, 17, under ANTARJANMAN).

BAHIR-BHITTI—The outer wall, an outside partition.

Antar-vapraṁ bahir-bhittiḥ śreshṭhaṁ dīrgaṁ cha chūlikā(-am) ।

(*M.*, IX, 361, etc.)

Cf. ANTARBHITTI.—(*See M.*, XL, 51, 52.)

BAHIR-MUKHA—With face towards the outside, projecting outward.

In connexion with foundations :

Gṛiha-garbham antar-mukhaṁ syād grāma-garbhaṁ bahir-mukham

(*M.*, XII, 216.)

BAHU-MAṆḌAPA (*cf.* MUKHA-MAṆḌAPA)—A kind of group pavilion.

Devālayeshu sarveshu saṁmukhe bahu-maṇḍapam ।

(*M.*, XXXIV, 33

The pavilion in front of a temple is generally called Mukha-maṇḍapa.

BAHU-LIṄGA—A kind of phallus, phalli in group.

(*M.*, LII, 75, 77, 72, etc. ; *see* under LIṄGA.)

BAHULA—An architectural member of the balance, the extended part of the scales outside the holes through which the scales are joined with the beam by strings.

Tad(jihvāgra)-ardham bahulaṁ kuryāt tan-mūle chhidra-saṁyutam ।

(*M.*, L, 184.)

BĀLA-PARYAṄKA (*see* PARYAṄKA)—A small bedstead, a couch.

BĀHYA-ŚĀLĀ—Outer rooms, external portion of mansions (*see* under ANTAḤ-ŚĀLĀ).

BĀHYA-SĀLA—Outer walls, external wall (*see* under ANTAḤ-ŚĀLA).

BĀHULYA (perhaps for BAHALYA, *see* BAHALA)—Abundance superfluity, extension, hence projection.

(1) Stambha-samaṁ bāhulyam—bāhulya is equal to the column.

(*Bṛihat-Saṁhitā*, LIII, 30.)

Vistāra-pāda-pratimaṁ bāhulyaṁ śākhayoḥ smṛitam—the projection of the two door-frames is equal to nearly one-fourth of the breadth (of the door).

(*Ibid.*, LVI, 13.)

Kern translates 'bāhulya' by thickness, which does not suit at least to the first instance (*see J.R.A.S.*, N. S., Vol. VI, pp. 285, 318.)

(2) Vistāra-pāda-pratimaṁ bāhulyaṁ śākhayoḥ smṛitam ।

(*Matsya-Purāṇa*, Chap. CCLXX, v. 20, same as no. 2 above.)

(3) Vistārārddhena bāhulyaṁ sarveshām eya kīrtitam ।

(*Agni-Purāṇa*, Chap. CIV, v. 29.)

BIMBA—An idol, an image.

(*M.*, LI, 22 ; LXVIII, 1, etc.)

Nirmmitaṁ śāṁti-nāthasya bimbakaṁ—'image of Śānti-nātha was made.'—(Honwad inscrip. of Someśvara 1, line 30, *Ind. Ant.*, Vol. XIX, p. 273.)

BI(VĪ)RA-GALA (also BĪRAGAL or BĪRAKAL, *see* VĪRA-ŚĀSANA)—Monuments set up in memory of a hero at first, and this honour is next extended to any one who dies after having done some good work ; lastly, it implies a simple memorial monument, resembling perhaps the pagoda-shaped maṭhas, constructed by the relatives and admirers of the departed ; a monumental stone erected in memory of a warrior.

(1) 'But her son Pilleya-Nāyaka, (after her death) performing the further ceremonies, set up this bīragal in the presence of the god Honneśvara, and made a grant of land (specified) for the offerings to the god Honneśvara and for carrying on the worship of the bīragal washing the feet of Janneya-guru. That Janneyaguru and his successors will carry on the worship of that bīragal we most firmly believe.'—(*Ep. Carnat.*, Vol. VII, Shimoga Taluq, no. 62, last four lines ; Roman Text, p. 42 ; Transl., nos. 61–62, p. 24, line 4 f.)

(2) 'His younger brother Channappa put up this bīra-kallu for him.'

'Her junior uncle Chenna put up this bīragal.'—(*Ep. Carnat.*, Vol. VII, Shikarpur Taluq, nos. 1, 2 ; Transl., p. 39.)

(3) 'A grant of land (specified) was made for maintaining the worship and ceremonies of this bīragal.'—(*Ep. Carnat.*, Vol. VII, Honnati Taluq, no. 117 ; Transl., p. 178.)

(4) 'And killing many who opposed him, he did his duty to his lord and gained the world of gods. His brother-in-law with his son and daughter, set up this vīra-śāsana for him.'—(*Ep. Carnat.*, Vol. VII, Shikārpur Taluq, no. 144 ; Transl., p. 107 ; Roman Text, p. 191.)

BUDDHA—'A being who by his own force has attained to possession of the highest knowledge. He is neither man nor god. He is able to perform certain wonders in accord with the laws of nature. In an endless series of existences the Buddha prepares himself for his

state of Buddhahood. During the whole of this time he is called a Budhisattva till in his last existence as a man he attains to knowledge (bodhi).'

(*Mahāvaṁśa*, W. Geiger, pp. 292–293.)

BUDDHA-PĀDA—The sacred footprint of Buddha, found in many places in Northern India, Indo-China, Siam and other places: analogous to the Ratna-pāda of Samantakuṭa of Ceylon; but the Buddhapāda of Sukhodaya in Siam is more elaborate and artistic; on the centre of the footprints are engraved two wheels (*chakra*), each containing six circles wherein are marked 108 signs. These signs are stated to represent the past, present, and future universe.

(*See* Plate LXVIII, p. 242, *Le Siam Ancien*, I, by M. Fournereau, quoted by P. N. Bose in his *Indian Colony of Siam*, pp. 64–65.)

The footprint of Buddha, otherwise called Śrīpāda and Ratna-pāda. It is seen in many places in Northern India, Ceylon, Indo-China, and Indian Archipelago. The one in Siam at Sukhodaya is described in detail in a Pali inscription of A. D. 1427 (*vide* Plate LXVIII, Fournereau, I, p. 242). It was carved after the pattern of the Śrīpāda at Samantakūṭa in Ceylon, and bears the same measurement, but more artistic in look and workmanship. On these footprints are marked two discs (*chakra*) each containing six circles within which are marked 108 signs. Below the footprints are represented 80 monks standing in a procession with folded hands and inclined heads in the pose of worshipping.

BUDDHI-SAṀKĪRṆA—A pavilion with fifty pillars.

(*Matsya-Purāṇa*, Chap. CCLXX, v. 9; *see* under MAṆḌAPA.)

BṚIHATĪ—The part of the body between the breast and backbone.

In connexion with the daśa-tāla measure:

Bṛihatī saptāṁśakaṁ kaksha-tāraṁ samāyatam ।
Bṛihatī stana-sīmāntam sārdha-dvir-ashṭa mātrakam ।

(*M.*, LXV, 162–163.

BERA—An idol or image.

(*M.*, LI, 17, 25; LXVII, 3, etc.)

'Created the temple of Chāmarājeśvara together with new images (vera).'—(*Ep. Carnat.*, Vol. IV, Chāmarājnagar Taluq, no. 86; Roman Text, p. 18, line 9 f.; Transl., p. 11.)

BODHIKA(-Ā) (also VODHIKA, *see* MAṆḌI)—The capital of the column (*M.*, XV, 40, 44, etc.), the crowning member of the capital;

this is placed upon the abacus (phalakā) and under the table of cornices. It may be identified with the carbel which in European architecture is a block of stone projecting from a wall and supporting the beams of a roof or any weight.

(*See Dravidian Arch. Jouveau Dubreuil*, ed. Aiyangar, p. 26.)

(*See Suprabhedāgama* XXXI, 107, 57 under STAMBHA.)

Cf. Bodhikaṁ mushṭi-bandham cha phalakā tāṭikā ghaṭam ।

(*M.*, XLVII, 18, etc.)

See the photographic views of the Corinthian capitals from Jamalgiri (Fergusson : *Hist. of Ind. and East. Arch.*, p. 173, figs. 94, 95).

See Buddhist Cave Temples (fig. no. 21, *Arch. Surv.*, New Imp. Series, Vol. IV, p. 62 ; Vol. XLI, figs. 1, 2, 3, 4, 5, 6).

BODHI-GṚIHA—A temple for the Bodhi-tree.

(W. Geiger, *Mahāvaṁśa*, p. 296.)

BODHI-MAṆḌA—A raised terrace near a temple, the miraculous throne under the Bodhi-tree at Gaya also called Vajrāsana or diamond throne.

Tenochchair Bodhi-maṇḍe śaśi-kara-dhavalaḥ sarvvato maṇḍapena
kāntaḥ prāsāda esha smare-bala-jayinaḥ kārito loka-śāstuḥ ।

'By him this beautiful mansion of the Teacher of mankind, who overcame the power of (the god) Smara, dazzling white as the rays of the moon, with an open pavilion on all sides has been caused to be made at the exalted Bodhi-maṇḍa.'

'Bodhi-maṇḍa is the name of the miraculous throne under the Bodhi-tree at Bodh-Gayā, also called the vajrāsana or diamond throne, on which Buddha and his predecessors sat, when attaining bodhi or perfect wisdom. And Professor Childers, in his *Pāli Dictionary*, added that he inferred that the term was also applied to the raised terrace built under the Bodhi-tree within the precincts of any Buddhist temple, in imitation, presumably, of Buddha's throne. This, rather than the throne itself, seems to be its meaning in the present inscription.'—(Sanskrit and Old Kanarese inscrip. no. 166, Bodh Gaya inscrip. of Mahanaman, line 10 f., *Ind. Ant.*, Vol. XV, pp. 358, 359, 357, c. 1, 2.)

BETTA—One of the two classes of the southern Jain architecture, the other is known as Basadi or Vasati. Bettas are courtyards usually on a hill or rising ground, open to the sky and containing images of Gomata or Gomateśvara.

BAUDDHA—Belonging to the Buddhists or Buddha, the Buddhist images.

Mānasāra (Chap. LVI, named Buddha, 1–18) :

Like all other images, the Buddhist images also are made of wood, stone or iron (line 14). Their pedestals are made of the three kinds of ābhāsa (marble or glass), of earth and of gravel, etc. (lines 15–16). They are also both stationary and movable (line 14). They are made in the erect or sitting posture and placed on the throne (lines 3–4), and are furnished with the *peepul* tree and the wonder-tree (Kalpavṛiksha). They have two arms, two legs, and two eyes (that is, one face) (line 10). They are measured in the large type of the daśa-tāla system (line 17). They are pure white in colour (line 5). Their garment is yellow (line 12), face large (line 5), ears long (line 6), eyes smiling at the corner (line 6), chest gracefully broad, arms long (line 10), belly large and round, and the body fleshy (line 8). They are furnished with shining top-knots (ushnīshojj-vala-maulika) (line 10).

BRAHMA-KĀNTA—A class of pillars, a type of storeyed buildings a class of gate-houses.

The square columns with four minor pillars :

Chatur-aśraṁ brahma-kāntaṁ syāt ।—(*M.*, XV, 20.)

Vedopapāda-saṁyuktaṁ brahma-kāntam īritam ।—(*Ibid.*, 244.)

A class of the three-storeyed buildings.—(*M.*, XXI, 39–40 ; *see* under PRĀSĀDA.)

A class of the five-storeyed buildings.— (*M.*, XXIII, 41–42 ; *see* under PRĀSĀDA.)

A class of gate-houses.—(*M.*, XXXIII, 558 ; *see* under GOPURA.)

BRAHMA-GARBHA—The foundations of temples (of Brahmā).

(*M.*, XII, 142–152 ; *see* under GARBHA-NYĀSA.)

BRAHMA-DVĀRA—The door in the middle or central part of an object.

Brahma-dvāra-patākādyair aṅgair yuktam vimānakam ।

(*Kāmikāgama*, L, 93.)

Brahma-dvāram iti proktaṁ vimānānāṁ sanātanam ।

(*Ibid.*, LV, 155.)

Brahma-dvāraṁ tato madye maṇḍapaṁ koshṭhake matam ।

(*Ibid.*, LV, 197.)

BRAHMA-PADA—The central part, the plot at the centre of a design.

(*M.*, XL, 73 ; LII, 165, etc. ; *see* under PADA-VINYĀSA.)

BRAHMA-BHITTI—The middle wall.

Athavā brahma-bhittau vā garbhādhānaṁ vidhīyate ।

(*Kāmikāgama*, XXXV, 46.)

BRAHMA-MAṆḌALA—The central part of a village or town.

(*M.*, IX, 128; *see* under GRĀMA.)

BRAHMA-MANDIRA—A type of rectangular building.

(1) *Agni-Purāṇa* (Chap. CIV, vv. 16–17; *see* under PRĀSADĀ).

(2) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 21–22, 26–27; *see* under PRĀSĀDA.)

BRAHMA-MASTAKA—A kind of joinery.

(*M.*, XVII, 149; *see* under SANDHI-KARMAN.)

BRAHMA-VĀHANA—The riding animal of Brahmā, the goose.

The measures and description of the goose (*M.*, LX, 4–46; *see* under VĀHANA.)

BRAHMA-STHĀNA—The central part of a village or town, where a public hall is built for the assemblage of the inhabitants.

(*M.*, XII, 142; *see* under GRĀMA.)

(1) Brahma-sthāne sabhādīni kalpayed vidhinā budhaḥ ॥
Brahma(-me) vā madhyame bhāge pīṭhaṁ parikalpayet ॥

(*Kāmikāgama*, XXVIII, 15, 18.)

(2) 'Senai . . . assigned (one) paṭṭi of land in the neighbourhood, to last as long as the moon and the sun, for his own merit (and) for the meritorious purpose of supplying to the Brahma-sthāna in this village water during six months and firepans (agnishṭhā) during six months and of constructing a water-lever in front of the maṇḍapa.'—(Inscrip. of Aditya II, no. 14, lines 1–2, *H. S. I. I.*, Vol. III, pp. 21–22.)

(3) 'We the great assembly of Maṇimaṅgalam . . . being assembled without a vacancy in the assembly, in the Brahma-sthāna in our village.'—(Inscrip. of Rajadhiraja, no. 28, line 7, *H.S.I.I.*, Vol. III, p. 57.)

(4) 'We the great assembly of Maṇimaṅgalam . . . being assembled, without a vacancy in the assembly, in the large maṇḍapa (of) the Brahma-sthāna of our village.'—(Inscrip. of Virarajendra I, no. 30, line 36, *H. S. I. I.*, Vol. III, p. 70.)

BRAHMĀṄGAṆA—The central courtyard.

(*See Kāmikāgama*, under AṄGAṆA.)

BRAHMĀṂSA (*see* BRAHMA-STHĀNA)—The central part of a village or town, where a public hall is generally built.

BH

BHAKTA—A devotee, a faithful worshipper, a class of sages.

Description of their images (*M.*, Chap. LIX, 1–100 named Bhakta) :

The devotees are divided into four classes, namely Sālokya, Sāmipya, Sārūpya, and Sāyujya (lines 3–4). The Sālokyas are those who specialize in devotion, knowledge and renunciation (vairāgya) (line 5). The Sāmipyas specialize in knowledge and renunciatian (line 6). The Sārūpyas are distinguished as those who are devoted to the meditation of God (line 7). And the Sāyujyas are those who have acquired the true knowledge (of God) and are aware of the final beatitude (paramārtha) (line 8).

The limbs of the Sālokya class of great men are measured in the largest type of the nava-tāla system (line 9). The Sāmīpyas are measured in the smallest type of the daśa-tāla system (line 10). The Sārūpyas are measured in the intermediate type of the daśa-tāla system (line 11). And the Sāyujyas are measured in the largest type of the daśa-tāla system (line 12).—(For details of these measures, *see* TĀLA-MĀNA.)

BHAṄGA—A pose in which an image is carved.

There are four bhaṅgas or poses, namely, sama-bhaṅga, ābhaṅga, ati-bhaṅga (*M.*, LVII, 98), and tri-bhaṅga (*ibid.*, 125).

'In this (sama-bhaṅga) type the right and left of the figure are disposed symmetrically, the sūtra or plumb-line passing through the naval, from the crown of the head to a point midway between the heels. In other words, the figure whether seated or standing, is poised firmly on both legs without inclining in any way to right or left. Images of Buddha, Sūrya (sun) and Vishṇu are generally made to follow this scheme of rigid, vertical symmetry. The dispositions or attitudes of the limbs and organs on either side are made exactly similar, except that the mudrā or symbolical posing of the fingers is different.'

'In such a (ābhaṅga) figure the plumb-line or the centre line, from the crown of the head to a point midway between the heels, passes slightly to the right of the naval. In other words, the upper hal f of the figure i made to incline slightly towards its right side, without inclining in any way towards either of the attendant deities. The Śaktis or attendant deities are two male and two female, in tri-bhaṅgas, placed on either side with their heads inclined inwards towards the principal figure. The figures on either side are exactly similar in poise, except that one is a reverse or reflex of the other. This is a necessary condition as otherwise one of the figures

would lean away from the central figure, and spoil the balance and harmony of the whole group.'

'A tri-bhaṅga figure had its head and hips displaced about one aṁśa to the right or left of the centre line.'

'This (ati-bhaṅga) is really an emphasized form of the tri-bhaṅga, the sweep of the tri-bhaṅga curve being considerably enhanced. The upper portion of the body above the hips, or the limbs below, are thrown to right or left, backwards or forwards, like a tree caught in a storm. This type is usually seen in such representations as Śiva's dance of destruction, and fighting gods and demons, and is specially adapted to the portrayal of violent action, of the impetus of the Tāṇḍava dancing, etc.'—(Translated by S. Ray, *Modern Review*, March, 1914, p. 1 f.)

BHADRA (*cf.* SARVATO-BHADRA and MUKHA-BHADRA)—A moulding, a type of portico, the general epithet of chariots, a type of building, site plan of one-hundred and ninety-six square plots (*cf.* PADAVINYĀSA; *M.* VII, 17–18.)

(1) A moulding of the base (*M.*, XIV, 345; *see* the lists of mouldings under ADHISHṬHĀNA).

A kind of portico :

In connexion with buildings of one to twelve storeys :

Ekaṁ vā dvi-tri-daṇḍena nirgamaṁ bhadram eva vā ।

(*M.*, XIX, 56.)

Cf. MADHYA-BHADRA (*M.*, XIX, 177) :

Toraṇair nīḍa-bhadrādi-mūle chordhve cha bhūshitam ।

(*M.*, XX, 64.)

In connexion with pavilions (maṇḍapas) :

Chatur-dig-bhadra-vistāram eka-bhāgena nirgamaṁ ।

(*M.*, XXXIV, 76.)

In connexion with mansions (śālās) :

Śālāyāḥ parito'lindaṁ pṛishṭhato bhadra-saṁyutam ।

(*M.*, XXXV, 40.)

Dvi-chatur-bhāga-vistāraṁ pārśvayor bhadra-saṁyutam ।
Pṛishṭhe cha dvyaika-bhāgena bhadraṁ kuryād vichakshaṇaḥ ।

(*Ibid.*, 322–323.)

In connexion with chariots :

Chatur-dikshu chatur-bhadraṁ syāt ।
Bhadra-madhye tu bhadraṁ syāt ।
Yuktyā bhadraṁ sarveshāṁ nāsikā-yuktam eva vā ।

(*M.*, XLIII, 107–109.)

Bhadra is the general name for chariot (ratha) :

Nivāta-bhadra, Pavana-bhadra, Prabhañjana-bhadra, Nabhasvān-bhadra, etc.

(*M.*, XLIII, 111–115.)

In connexion with dolā (palanquin or hammock) :

Purato prishṭhato madhye parva (darpa)ṇaṁ bhadrasaṁyutam ।

(*M.*, L, 165.)

Chatur-dikshu sa-bhadraṁ vā chaika-dvyaṁśena nimnakam ।

(*Ibid.*, 284.)

(2) Āyataḥ syāt tribhir bhāgair bhadra-yukta-suśobhanaḥ ।

(*Matsya-Purāṇa*, Chap. CCLXIX, v. 5.)

(3) Maṇḍapasya chaturthāṁśād bhadraḥ kāryyo vijānatā ॥
Maṇḍapās tasya karttavyā bhadrais tribhir alaṅkritāḥ ॥

(*Garuḍa-Purāṇa*, Chap. XLVII, vv. 35, 39.)

A type of quadrangular building :

(4) *Agni-Purāṇa* (Chap. CIV, vv. 14–15 ; *see* under PRĀSĀDA).

(5) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 24–25 ; *see* under PRĀSĀDA).

(6) Vi-bhadrā vā sa-bhadrā vā kartavyā mālikā budhaiḥ ॥
Sa-bhadrā vā vi-bhadrā vā khalūrī syād yatheshṭataḥ ॥

(*Kāmikāgama.*, XXXV, 100, 106.)

Śālānanaṁ prakartavyam eka-dvyaṁśa-vinirmitam ।
Tad-tad-agre prakartavyaṁ vāre bhadrasya paśchime ॥

(*Ibid.*, XLV, 35.)

Chatur-dig-bhadra-saṁyuktaṁ dvāra-jālaka-śobhitam ॥

(*Ibid.*, XLI, 26.)

A class of buildings (*Ibid.*, XLV, 41 ; *see* under MĀLIKĀ.)

BHADRAKA—The general name for chariots.

(*M.*, XLIII, 112–116 ; *see* under RATHA.)

BHADRA-PAṬṬA—A moulding of the base.

(*M.*, XIV, 345 ; *see* the lists of mouldings under ADHISHṬHĀNA.)

BHADRA-PĪṬHA—A type of pedestal of the phallus or an image.

(*M.*, LIII, 34 ; *see* under PIṬHA.)

The pedestal of an image.—(*M.*, LIV, 129, 173.)

A state chair.—(*Mahāvagga*, v. 10, 2.)

BHADRA-MAṆḌAPA—A type of pavilion.

Cf. Maṇḍapaṁ bhadram ity-uktaṁ bāhya(dhānya)-nikshepa-yogya-kam ।

(*M.*, XXXIV, 190.)

See Bilvan ātheśvara inscrip. of Vira-champa (vv. 1, 2, 3, *Ep. Ind.*, Vol. III, pp. 70, 71 ; *see* under MAṆḌAPA.)

BHADRA-ŚĀLĀ—A type of hall, a front room, a drawing-room.

In conneixon witlı the eight-storeyed buildings :

Netra-śālārdha-śālā cha bhadra-śālādi-bhūshitam ।

(*M.*, XXVI, 67, etc.)

BHADRĀSANA—A kind of throne, a chair of state, a great seat.

(*M.*, XLV, 14, etc.)

BHAVANA—An abode, a residence, a dwelling, a site, a building, a mansion.

A kind of rectangular building :

(1) *Agni-Purāṇa* (Chap. CIV, vv. 16–17 ; *see* under PRĀSĀDA.)

(2) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 21–22, 26–27 ; *see* under PRĀSĀDA.)

(3) Maṇḍapaṁ nava-talaṁ kuryād bhavanam anya-raṅgaṁ vādhi-maṇḍapākāram ।

(*M.*, XI, 144.)

(4) Tenedaṁ Parameśvarsya bhavanaṁ dharmmātmanā kāritam . . . kaṇvāśrame ।

' He, the pious minded, had his dwelling (temple) of the supreme Lord made, . . . in the hermitage of Kaṇva.'—(Kanaswa inscrip. of Śivagana, line 11 f., *Ind. Ant.*, Vol. XIX, pp. 58, 61.)

(5) Śubhrābrābham idaṁ Bhavasya bhavanaṁ kārāpitaṁ bhūtale ।

' This temple of Bhava (Śiva), resembling the white cloud (or mountain, snowy Himālayas) was caused to be built on the earth.'—(Dhanop inscrip. of Chachcha, v. 2, *Ind. Ant.*, Vol. XL, p. 175.)

BHAVANA-KĀNTA—A class of the ten-storeyed buildings.

(*M.*, XXVIII, 9–13 ; *see* under PRĀSĀDA.

BHĀGA-PAÑCHA—A pavilion with thirty-two pillars.

(*Matsya-Purāṇa*, Chap. CCLXX, v. 12 ; *see* MAṆḌAPA.)

BHĀGA-MĀNA (*cf.* GAṆYA-MĀNA)—Proportional measurement.

(*M.*, XIII, 43 ; XVIII, 84 ; XXXIII, 216, 247, etc. ; *see* MĀNA.)

BHĀRA (*see* BHĀRĀ and STAMBHA)—Beams, cross-beams.

Probably same as hārā or hārikā, a chain, an ornament (? bead, astragal, baguette, *see Gwilt. Encycl.*, fig. 873) below the neck of the column.

Stambha-samaṁ bāhulyaṁ bhāra-tulānām upary-upary-āsām ।
Bhavati tulopatulānām ūnaṁ pādena pādena ॥

(*Bṛihat-Saṁhitā.*, LIII, 30.)

Dr. Kern translates 'bhāra' by cross-beams (*J.R.A.S.*, N. S., Vol. VI, p. 285).

BHĀRAKA—A support, a synonym of the column.

(*M.*, XV, 5; *see* under STAMBHA.)

See Suprabhedāgama (XXXI, 121) under BHĀRĀ.

BHĀRĀ (*see* BHĀRA and HĀRĀ)—A support, a beam.

(1) In connexion with buildings of one to twelve storeys:

Chatuḥ-śalā chatush-kūṭaṁ chāshṭa-bhārā sa-pañjaram ।

(*M.*, XX, 72, etc.)

(2) Eka-daṇḍāntar-bhārā tu madhya-bhārā dvi-daṇḍataḥ ।
Chatur-daṇḍa-pramāṇena kṛitvā maryyāda-bhittikam ॥
Maṇḍale dvārake vātha dvāra-śālāṁ tu bhārake ॥
Prāsādaṁ madhya-bhārāyāṁ maryyādau harmyam eva cha ॥

(*Suprabhedāgama*, XXXI, 117, 121; for full context *see* VV. 115–122, under PRĀKĀRA.)

BHITTI—A wall, a partition, a support.

(1) Bhittiḥ strī kuḍyam ।
Bhittiḥ kuḍye prabhede cha ।

(*Amarakōsha*, 2, 2, 4.)

(2) Purato'lindam ekāṁśaṁ bhittiṁ kuryāt samantataḥ ।

(*M.*, XXXV, 118; compare also XV, 231; XXXVIII, 6; XL, 57; LVI, 16; etc.)

(3) Vistārārdhaṁ bhaved garbho bhittayo'nyaḥ samantataḥ ।

'The adytum measures half the extent (of the whole) and has its separate walls all around.'—(*Bṛihat-Saṁhitā*, LVI, 12; *J.R.A.S.*, N. S., Vol. VI, p. 318; *see* also *Matsya-Purāṇa*, Chap. CCLXIX, VV. 8, 9, 12.)

(4) Tri-hastāntaṁ tu vistāro bhittīnāṁ parikīrtitaḥ ॥
Mūla-bhitter idaṁ mānam ūrdhve pādārdha-hīnakam ।
Anyo'nyam adhikā vāpi nyūnā vā bhittayaḥ samāḥ ॥

(*Kāmikāgama*, XXXV, 32, 33.)

Tri-bhāgena bhaved garbhaṁ samantād bhittir ishyate ॥
Dvy-adhikena bahir-bhittiḥ śeshaṁ prāgvat prakīrtitam ॥
Liṅge śilānta(-te) cha krodhe bhitti(ḥ) pañchā-(ṁ)śa-varjitaḥ ।
Kiṁchin nyūnam alindaṁ vā śeshaṁ kuḍyeshu yojayet ॥

(*Kāmikāgama*, L, 82, 86, 87.)

The synonyms of bhitti :

. . . dvāri kuḍyaṁ cha kuṭṭimam ॥
Bhitter ākhyeyam ākhyātam . . . ॥

(*Ibid.*, LV, 199-200.)

(5) Navāṁśaṁ garbha-gehaṁ tu bhitti-mānaṁ tu shoḍaśa ॥
Shoḍaśaṁ bhitti-mānaṁ tu bhittim abhyantaraṁ viduḥ ।
Tad-bāhyaikaṁ tu salilaṁ tad-bāhyaikaṁ tu bhittikam ॥
Bāhya-bhittau chatur-dvāram athavā dvāram ekataḥ ।
Anyat sarvaṁ samaṁ proktaṁ stūpy-antaṁ kārayed budhaḥ ॥
Yad uktaṁ bhitti-vistāraṁ bāhyābhyantarayoḥ samam ।
Bāhye vābhyantare vāpi tri-vidhaṁ bhitti-mānakam ॥
Pīṭhasya tri-guṇaṁ garbhaṁ ta-(t)-tri-bhāgaika-bhittikam ॥

(*Suprabhedāgama*, XXXI, 4, 6, 7, 8, 12.)

(6) Prāsāda-vara-varyeshu śilāvatsu sugandhishu ।
Ushitvā meru-kalpeshu kṛita-kāñchana-bhittishu ॥

(*Rāmāyāṇa*, II, 88, 7, etc.)

(7) Atyuchchair bhitti-bhāgair divi divasa-pati-syandanaṁ vā vigṛihṇan yenākāri koṭaḥ ।

'By whom the fort (in this place) was built, which perhaps may arrest the chariot of the sun in the sky by its (very) high walls.'—(An Ābu inscrip. of the reign of Bhimadeva II, v. 9, *Ind. Ant.*, Vol. XI, pp. 221, 222.)

(8) Suttālayada bhittiya māḍisi chavvīsa-tīrttha-karaṁ māḍisidaru ।

'Śrī Basavi Seṭṭi . . . had the wall round the cloisters and the twenty-four Tirtha-karas made.'—(*Ep. Carnat.*, Vol. II, no. 78 ; Roman Text p. 62 ; Transl., p. 151.)

(9) 'Koneri, son of . . . erected a nava-raṅga of 10 aṅkaṇas, with secure foundation and walls (vajra-bhitti-goḍe) for the god Tirumala of the central street of Malalavāḍi.'—(*Ep. Carnat.*, Vol. IV, Hunsur Taluq, no. 1 ; Transl., p. 83; Roman Text, p. 134.)

BHITTI-GṚIHA—A wall-house, a small closet inside the wal resembling a cupboard.

(*M.*, XL, 63, etc.)

BHITTI-SOPĀNA—A kind of surrounding steps made through a wall.

(*See Kauṭilīyā-Artha-śāstra* under SOPĀNA.)

BHINDA-ŚĀLĀ—A kind of detached building with a balcony in front, paṇḍi-śālā with a verandah in front (*see* PANDI-ŚĀLA).

(*M.*, XXXV, 98 ; *see* under ŚĀLĀ.)

BHŪ-KĀNTA—A class of storeyed buildings.

A class of eight-storeyed buildings.—(*M.*, XXVI, 3–20 ; *see* under PRĀSĀDA.)

A class of the ten-storeyed buildings.—(*M.*, XXVIII, 6–8 ; *see* under PRĀSĀDĀ.)

BHŪTA-KĀNTA—A class of the five-storeyed buildings.

(*M.*, XXIII, 13–15 ; *see* under PRĀSĀDA.)

BHŪ-DHARA—A type of oval building.

(1) *Agni-Purāṇa* (Chap. CIV, VV. 19–20 ; *see* under PRĀSĀDA).

(2) *Garuḍa-Purāṇa* (Chap. XLVII, VV. 29–30 ; *see* under PRĀSĀDA).

BHŪPA-KĀNTA—A class of the eight-storeyed buildings.

(*M.*, XXVI, 22–28 ; *see* under PRĀSĀDA.)

BHŪ-PARĪKSHĀ—Testing the site and soil where a village, town or building is constructed.

All the *Vāstu-śāstras* have elaborate descriptions on the subject. The principles and details are similar in the treatises examined below.

(1) The soil of the plot, where a village, town, fort, palace, temple or house is to be built, is examined with regard to its shape, colour, odour, feature, taste and touch (*M.*, III, 16–32). The elevation of the ground as well as the luxuriant growth of certain plants, trees and grasses on the ground are also examined (*M.*, IV, 4–38). If a plot of land is found to be satisfactory on all or most of these examinations, it should be selected for a village, town, fort, or house, as the case may be. But even after this selection, it would be wise to test the ground by some other ways.

A square hole of one cubit deep should be dug on the selected site and be filled up with water. After 24 hours the chief architect should mark the condition of the water in the hole. If all the water be dried up by this time, the earth is taken to be very bad. But if, on the other hand, there remains some water in the hole, the selected plot of land would be fit for any building—(*M.*, V. 20–30).

Another final test is that a similar hole is dug on the plot and filled up with the earth taken out of it. If this earth be not quite enough to fill

up the hole, the ground is taken to be very bad, but if this earth overfills the hole, the soil is stated to be very good for any building.—(*M.*, v. 34–37.)

The general import of the last two tests that in the former case, the very dry land is avoided, while in the latter, very loose or sandy land is said to be unfit for the construction of a building.

(2) *Bṛihat-Saṁhitā*, Chap. LIII, vv. 96, 97 (ed. Kern, *Bibliotheca Ind. A. S. Bengal*, New Series, nos. 51, 54, 59, 63, 68, 72 and 73).

Sita-rakta-pīta-kṛishṇā viprādīnāṁ praśasyate bhūmiḥ ।
Gandhaś cha bhavati yasyā ghṛita-rudhirānnādya-madyasamaḷ ।
Kuśa-yuktā sara-bahulā dūrvākāśāvṛitā krameṇa mahī ।
Anuvarṇaṁ vṛiddhi-kari madhura-kashāyāmla-kaṭukā cha ॥

See also vv. 85–94 and then compare the last line of the verse 95 :

Tat tasya bhavati śubhadaṁ yasya cha yasmin mano ramate ।

'In general the soil (ground) will be suitable to any one whose mind is pleased with it.'

Compare also the eleven lines quoted from :

(3) Garga by the commentary of *Bṛihat-Saṁhitā*, which are again quoted by Dr. Kern.

(4) 'The Viśvak (1, 61, sqq.) contains the same rules, but in other words.'

(5) Part of the corresponding passage from Kāśyapa is quoted by Rām Rāz (*Arch. of Hind.*, p. 17.)

(*J.R.A.S.*, N. S., Vol. VI, p. 295, note 2.)

Vāstu-Ratanāvalī (a compilation, ed. Jivanatha Jyotishi, 1883, pp. 8, 10) :

(6) On colour of ground, quotation from *Vasishṭha-saṁhitā* :

Śvetā-śastā dvijendrāṇāṁ raktā bhūmir mahī-bhūjām ।
Viśāṁ pītā cha śūdrāṇāṁ kṛishṇānyeshāṁ vimiśritā ॥

(7) From the *Vāstu-pradīpa* :

Śukla-mṛitsnā cha yā bhūmir brāhmaṇi sā prakīrtitā ।
Kshatriyā rakta-mṛitsnā cha harid-vaiśyā prakīrtitā ॥
Kṛishṇā bhūmir bhavech chhūdrā chaturddhā parikīrtitā ॥

(8) On taste, from *Nārada* :

Madhuraṁ kaṭukaṁ tiktaṁ kashāyaṁ cha rashāḥ kramāt ॥

(9) On smell, from the *Gṛiha-kārikā* :

Ghṛitāsṛig-anna-madyānāṁ gandhaś cha kramaśo bhavet ॥

(10) On declivity, from *Bhṛigu* :

Udag-ādi plavam ishṭaṁ viprādīnāṁ pradakshiṇenaiva ।
Vipraḥ śarvvatra vased anuvarṇam atheshṭam anyeshām iti ॥

(11) *Śilpa-dīpaka* (ed. Gaṅgādhara, 1, 22–23) :

Śvetā brāmhaṇa-bhūmikā cha ghṛitavad-gandhā susvādinī ।
Ratkā śonita-gandhinī nṛipati-bhūḥ svāde kashāye cha sā ॥

Svāde'mlā tila-taila-gandhīr uditā pītā cha vaiśya-mahī ।
Kṛishṇā matsya-sugandhinī cha kaṭukā śudreti bhū-lakshaṇam ॥

(12) *Bhavishya-Purāṇa* (Chap. cxxx, vv. 42–44) :

Ishṭa-gandha-rasopetā nimnā bhūmiḥ praśasyate ।
Śarkarā-tūsha-keśāsthi-kshārāṅgāra-vivarjitā ॥
Megha-dumdubhi-nirghoshā sarva-vija-prarohiṇī ।
Śuklā raktā tathā pītā kṛishṇā kathitā kshitiḥ ॥
Dvija-rājanya-vaiśyānāṁ śūdrāṇāṁ cha yathā-kramāt ।

Then follows the examination proper of the soil (vv. 44–45). A pit is dug in the ground and filled up with the sand which is taken out exactly in the same way as in the *Mānasāra*. The quality of the soil varies from best to worst as the sand is in excess, equal and less in filling up the pit.

BHŪMA (*see* TALA)—A storey, a floor.

Eka-bhūmaṁ dvi-bhūmaṁ vā kshudrāṇaṁ bhavanaṁ nṛiṇām ।
(*Śilpa-śāstra-sāra-saṁgraha*, VIII, 29.)

BHŪMI-(KA) (*see* TALA)—Earth, ground, soil, a place, a region a spot, a site, a situation, a storey, the floor of a house.

(1) In the *Mānasāra* a chapter (XI) is named Bhūmi-lamba which describes the dimensions of different storeys :

Bhūmi-lamba-vidhiṁ . vakshye śāstre saṁkshepataḥ kramāt ।
Uktaṁ hi bhūmi-lambaṁ syād ekānta-bhūmikam ।
Etad dvā-daśa-bhumy-antaṁ janmādi-stūpikāntaṁ syāt ।
(*M.*, XI, 1, 5, 125, etc.)

(2) Kshatriyādeḥ pañcha-bhūmir dvijānāṁ rāga-bhūmikam ।
(*Śilpa-śāstra-sāra-saṁgraha*, VIII, 30.)

(3) Vimāno'strī deva-yāne sapta-bhūmau cha sadmani ।
(Nigaṇṭu ; *see Rāmāyaṇa* under VIMĀNA.)

(4) Sapta-bhaumāshṭa-bhaumaś cha sa dadarśa mahāpurīm ।
(*Rāmāyaṇa*, V. 2, 50 ; *see also* VI, 33, 8.)

(5) Ekaiva cha bhūmikā tasya syad ekā tasya cha bhūmikā ।
(*Bṛihat-Saṁhitā*, LVI, 23 ; *see* Kāśyapa, quoted by Kern, *J.R.A.S.*, N. S., Vol. VI, p. 320.)

(6) Śata-śṛiṅgaś chatur-dvāro bhūmikā-shoḍaśochchhritaḥ ।
(*Matsya-Purāṇa.*, Chap. CCLXIX, v. 31 ; *see also* vv. 37, 38, 39, 40, 42, 43, 44, etc.)

(7) Rāja-kanyāṁ . . . sapta-bhūmika-prāsāda-prānta-gatām ।
(*Pañchatantra*, ed. Bombay, I, p. 38.)

(8) A floor (Bheragha inscrip. of Alhanadevi, v. 27, *Ep. Ind.*, Vol. II pp. 12, 16.)

BHŪMI-LAMBA—The height of a storey; according to the *Kāmikāgama* (*see* below) and the *Mānasāra* the term implies the dimensions of storeys.

(1) The five series of breadth in the smallest type of one-storeyed buildings are 2, 4, 6, 8 and 10 cubits; and the five series of length are 3, 5, 7, 9, and 11 cubits. In the intermediate type the five series of breadth are 5, 7, 9, 11 and 13 cubits and the five series of length 6, 8, 10, 12 and 14 cubits. In the largest type the five series of breadth are 6, 8, 10, 12 and 14 cubits and the five series of length are 7, 9, 11, 13 and 15 cubits.

(*M.*, XI, 6-12.)

All the twelve storeys are in this way measured separately.

(*M.*, XI, 13–125.)

These are stated to be the dimensions in the Jāti class of buildings. Three-fourths, half and one-fourth of these dimensions are prescribed, for the Chhanda, Vikalpa and Ābhāsa classes respectively.

(2) Chatur-aṁśādi-saṁsthānaṁ bhūmi-lambam iti smṛitam |

(*Kāmikāgama*, L, 1.)

Then follow the dimensions of the storeys from one to twelve and sixteen (*ibid.*, vv. 2–34). The five proportions of the height of storeys, as 'bhumi-lamba' means, are given under the same five technical names as in the *Mānasāra*, viz., Śāntika, Pushṭa, Jayada, Adbhuta, and Sarvakāmika (vv. 24, 25–28). The Jāti, Chhanda, Vikalpa and Ābhāsa classes of buildings are also distinguished (vv. 9–13).

(3) Varāhamihira describes the height, etc. of the buildings of the Brāhmans, kings, ministers and others (*Bṛihat-Saṁhitā*, LIII, 4–26). But the general rule about the height of the storey (bhūmikā) is also given (*Bṛihat-Saṁhita*, LVI, 29–30):

Bhūmikāṅgula-mānena mayasyāshṭottaraṁ śatam |
Sārdhaṁ hasta-trayaṁ chaiva kathitaṁ viśvakarmaṇā ||
Prāhuḥ sthapatayaś chātra matam ekaṁ vipaśchitaḥ |
Kapota-pāli-saṁyuktā nyūnā gachchhanti tulyatām ||

'A storey's altitude is of 108 digits according to Maya, but Viśvakarman pronounces it to be of three cubits and a half (i.e. 84 digits). As to this, however, able architects have declared that (in reality) there is no discrepancy of opinion, for, if you add the height of the crown-work (kapota-pāli) the smaller number will equal (the greater).'—Dr. Kern.

BHŪ-MUKHA—A type of oval building.

(*Garuḍa-Purāṇa*, Chap. XLVII, vv. 29-30; *see* under PRĀSĀDA.)

BHŪSHAṆA—A class of storeyed buildings, a moulding, a type of pavilion, articles of furniture, ornaments.

A type of oval building—(*Agni-Purāṇa.*, Chap. CIV, vv. 19-20 ; *see* under PRĀSĀDA.)

A class of the nine-storeyed buildings—(*M.*, XXVII, 13-14 ; *see* under PRĀSĀDA.)

A moulding of the column—(*M.*, XV, 93, etc.)

A type of pavilion :

Devānāṁ cha maunārthaṁ bhūshaṇākhyaṁ tu maṇḍapam ।
(*M.*, XXXIV, 349.)

Mānasāra (Chap. L, 1–309) named Bhūshaṇa :

The ordinary ornaments for the body are called ' aṅga-bhūshaṇa' (lines 1–44, 288–309) and the articles of house-furniture ' bahir-bhūshaṇa, (44–288).

Ornaments are here divided broadly into four classes, namely, Patra-kalpa, Chitra-kalpa, Ratna-kalpa and Miśrita or Miśra-kalpa (lines 3–4). All these are suited to the deities. The emperor or Chakravartin can put on all these except the Patra-kalpa. The kings called Adhirāja and Narenda can wear both Ratna-kalpa and Miśrita. The Miśra-kalpa is prescribed for all other kings.

Patra-kalpa is so called because it is made of leaves and creepers. Chitra-kalpa is made of flowers, leaves, paintings, all precious stones and other decorations. The Ratna-kalpa is made of flowers and jewels. And the Miśra-kalpa is made of leaves, jewels and the mixture of all others. These four kinds are specially made for the images of Gods and Kings only (line 1).

The ordinary ornaments of the body include among others Pādanūpura (anklet), Kirīṭa (diadem), Mallikā (a jasmine-like ornament), Kuṇḍala (ear-ring), Valaya (bracelet), Mekhalā (belt), Hāra (chain), Kaṅkaṇa (bracelet for the wrist), Śiro-vibhūshaṇa (head-gear), Kiṅkinī (little-bells), Karṇa-bhūshaṇa (ear-rings, etc.), Keyūra (armlet), Tāṭaṅka (large ear-ring), Karṇa (ear ornament), Chūḍā-maṇi (crest-jewel), Bāla-paṭṭa (little tiara), Nakshatra-mālā (necklace of 27 pearls). Ardha-hāra (half chain of 64 strings), Svarṇa-sūtra (gold chain worn round the breast), Ratna-mālikā (garland of jewels), Chira (a pearl necklace of four strings), Svarṇa-kañchuka (gold armour), Hiraṅya-mālikā (gold chain), Lamba-hāra (long suspended chain), etc. The ornaments like crown, etc. are described elsewhere.

The articles of house furniture include among others Dīpa-daṇḍa (lamp-post), Vyajana (fan), Darpaṇa (mirror), Mañjūshā (basket, wardrobe, almirah,etc.), Dolā (swing, hammock, palanquin, etc.), Tulā

and Tulā-bhāra (balance), Pañjara (cage), and Nīḍa (nest), etc., for the domestic animals (except cows, horses, elephants, described elsewhere) and birds (lines 45–288). The articles of furniture like car, chariot, throne, bedstead, etc., are described elsewhere.

BHOGA—A class of the single-storeyed buildings.

(*M.*, XIX, 167; *see* under PRĀSĀDA.)

BHOGA-MAṆḌAPA (*cf.* MAṆḌAPA)—The refectory, an appurenance of the temple.

(*M.*, XXXII, 55, etc. ; *see* under MAṆḌAPA.)

BHOJANA-MAṬHA—A refectory, a dining-hall.

'The meritorious gift of a refectory (bhojana-maṭha) for the community (Saṅgha) by the Yavana Chiṭa (Chaitra) of the gates (or of the Gatā country.) '—(Junnar inscrip. no. 8, *Arch. Surv.*, New Imp. Series, Vol. IV, p. 94.)

BHAUMA (*see* BHŪMI)—A storey, the floor of a house.

Dvādaśa-bhauma, daśa-bhauma, shaḍ-bhauma, sapta-bhauma ।

(*Bṛihat-Saṁhitā*, LVI, 20, 21, 22, 24, 27.)

BHRAMA—The enclosing cloisters, a covered arcade, an enclosed place of religious retirement, a monastic establishment.

'The temple itself, with its enclosing cloisters (bhrama) measures . . . The court is surrounded by cloisters (bhaṁti-bhrama) in which, besides three small temples on the north, south and west sides each in line with the centre of the principal maṇḍapa, there are the orthodox number of fifty-two small shrines (*cf.* Prākāra and Parivārālaya) each crowned by a śikhara or spire.'

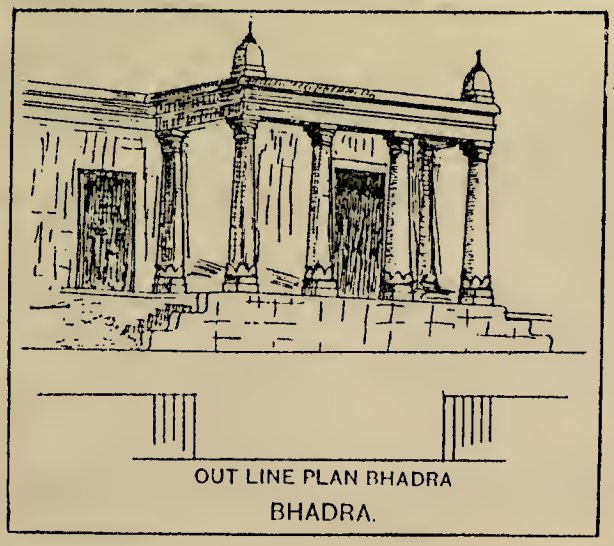
'The inner façade of the cloister or bhaṁti (Skr. bhrama) is interrupted only by the three small temples mentioned above, by the large entrance porch on the east, and by smaller entrances on the north and south near the east end. The corridor (alinda) is about nine feet wide all round and is raised by four steps above the level of the court.'

'The entrance porch on the east projects considerably and is flanked inside by stairs, in line with the bhaṁti (bhrama) on each side . . . '—(Ahmadabad Arch. Burgess, *Arch. Surv.*, New Imp. Series, Vol. XXXIII, pp. 87, 88.)

BHRAMAṆA (*see* PRADAKSHIṆA)—A surrounding terrace, an enclosing verandah, a circular path.

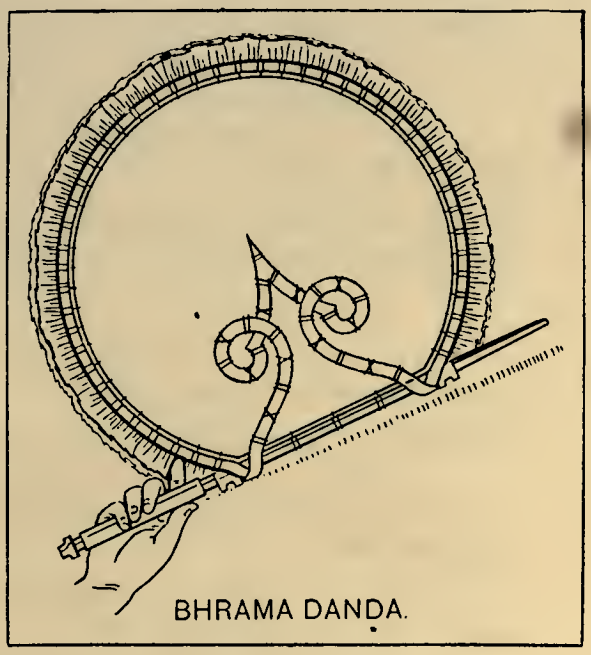
Śikharasya tu turyyeṇa bhramaṇaṁ parikalpayet.

(*Agni-Purāṇa*, Chap. XLII, v. 12, etc.)

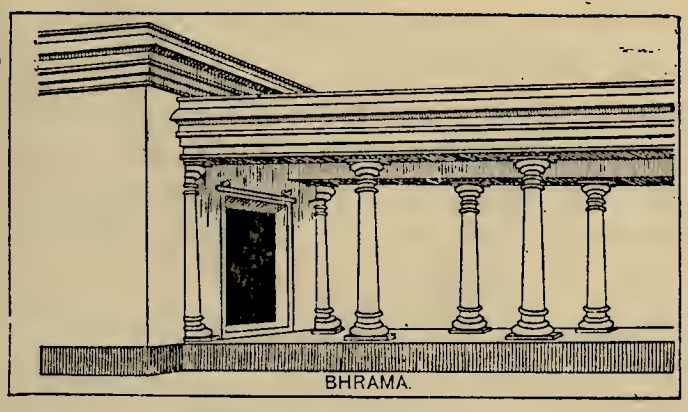


OUT LINE PLAN BHADRA

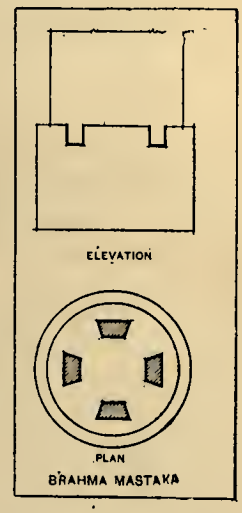
BHADRA.



BHRAMA DANDA.



BHRAMA.



ELEVATION

PLAN

BRAHMA MASTAKA

BHRAMA-DAṆḌA—A kind of post for a large fan.

(*M.*, L, 104 ; *see* under VYAJANA.)

BHRAMĀLINDA—A surrounding balcony or terrace.

(*M.*, XXXIV, 304, 497, etc. ; *see* under ALINDA.)

M

MAKARA-KUṆḌALA—A crocodile-shaped ornament for the ear of an image.

(*M.*, LI, 53 ; *see* under BHŪSHAṆA.)

MAKARA-TORAṆA (*see* TORAṆA)—An arch marked with makara (an animal-like shark or crocodile).

Dvayor makarayor vakraiḥ śaktaṁ madhyama-pūritam ।
Nānā-vidha-latā-yuktam etan makara-toraṇam ॥

(*Kāmikāgama*, LV, 65.)

For the details of such an arch, *see Annual Report of Arch. Survey of India* (1903–04, p. 227 f.), *Mānasāra* (Chaps. XLVI, XLVIII) and *Suprabhedāgama* (XXIX, 68–72) under TORAṆA.

MAKARA-BHŪSHAṆA—An ear-ornament.

(*M.*, L, 26 ; *see* under BHŪSHAṆA.)

MAKARĀPATRA—An ornament of an arch generally above the column.

Tad-ūrdhve toraṇasyānte makarāpatra-saṁyutam ।

(*M.*, XV, 133.)

MAKARĀLA—An architectural member of a hall.

(*M.*, XXXV, 373 ; *see* under ŚĀLĀ.)

MAKARĪ-VAKTRA—The face of a female shark, employed as an ornament for an arch above a column.

(*M.*, XV, 136.)

MAKUṬA—A head-gear, a diadem, a crown.

(*M.*, VII, 164; XII, 120 ; XLIX, 15 ; LIV 23, etc.)

MAṄGALA—A kind of throne, a village, a type of pavilion.

A throne.—(*M.*, XLV, 4; *see* under SIṀHĀSANA.)

A village (*Kāmikāgama*, XX, 3 ; *see* under AGRAHĀRA).

A type of pavillion—(*M.*, XXXIV, 481–448 ; *see* under MAṆḌAPA.)

MAṄGALA-VĪTHI—A broad road surrounding a village or town, also called Rāja-vīthi and Ratha-vīthi.

(*See Kāmikāgama*, under RĀJA-VĪTHI.)

MAJJANĀLAYA—A detached building for bath or washing.

(*M.*, XL, 103.)

MAÑCHA—A bedstead, couch, bed, sofa, a chair, throne, a platform, a pulpit, a loft.

A synonym of the bedstead (*M.*, III, 11), of the entablature—(*M.*, XVI, 18.)

Mañcha-paryaṅka-palyaṅkāḥ kaṭvyā-samāḥ ।

Palyaṅko mañcha-paryaṅka-vṛishī-paryastikāsu cha । Iti Medinī ।

(*Amarakôsha*, 2, 3, 138.)

In connexion with buildings of one to twelve storeys :

Adhishṭhāna-samaṁ mañchārdhe'rdhena vapra-yuk ।

(*M.*, XXI, 14, etc.)

A component part of the bedstead (*M.*, XLIV, 86).

A platform :

Daśa-bhāgau dvau pratimañchau—' two-tenths of it for the formation of two platforms, opposite to each other.'—(*Kauṭilīya-Artha-śāstra*, Chap. XXIV, p. 53.)

MAÑCHA-KĀNTA—A class of the four-storeyed buildings.

(*M.*, XXII, 47–57 ; *see* under PRĀSĀDA.)

MAÑCHA-BANDHA—A class of bases comprising four types which differ from one another in height and in the addition or omission of some mouldings.

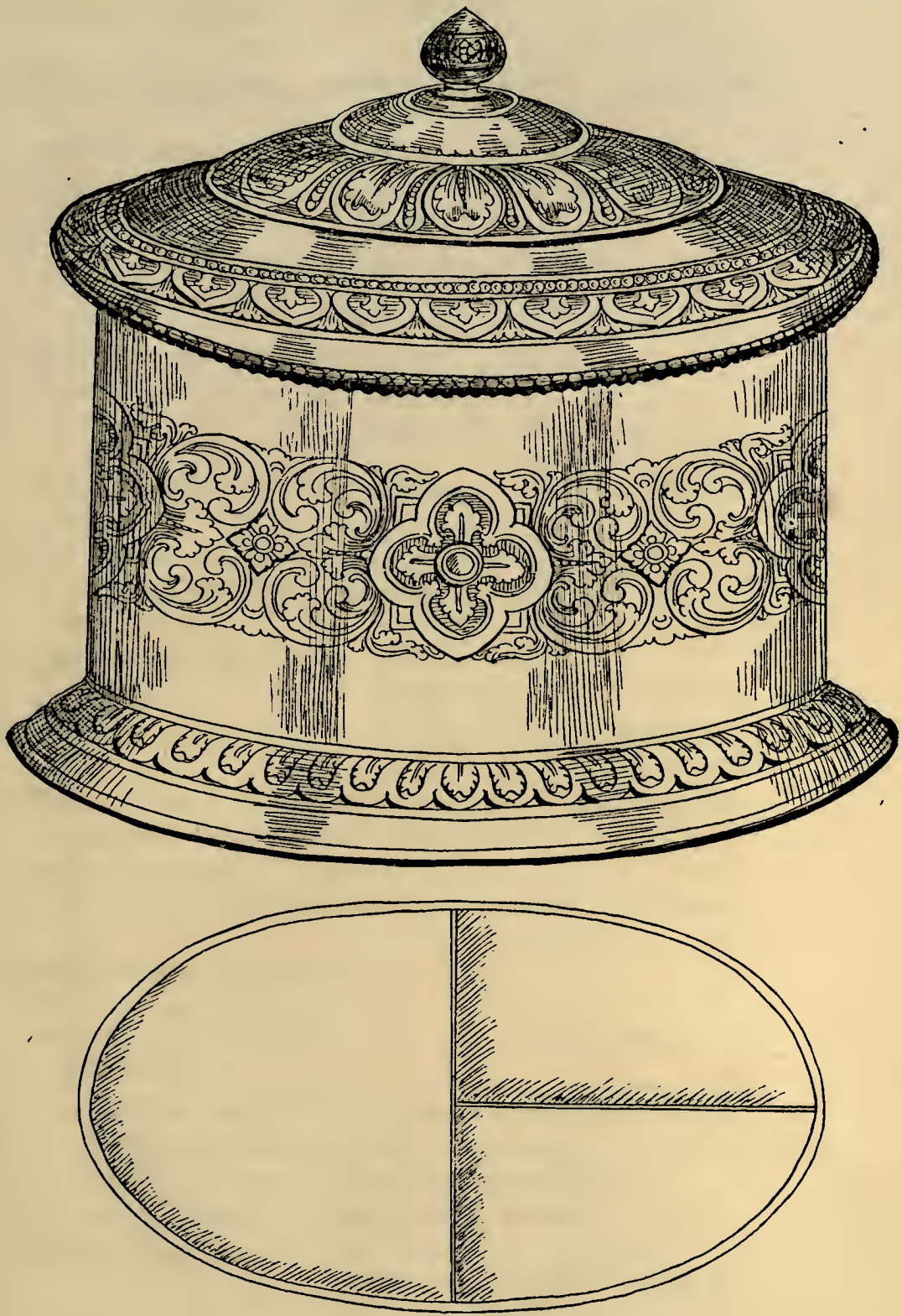
(*M.*, XIV, 127–149 ; *see* the lists of mouldings under ADHISHṬHĀNA.)

MAÑCHA-BHADRA—One of the three classes of pedestals, the other two being Vedi-bhadra and Prati-bhadra. It has four types differing from one another in height and in the addition or omission of some mouldings.

(*M.*, XIII, 93–127 ; *see* the lists of mouldings under UPAPĪṬHA.)

MAÑCHALĪ—A synonym of the bedstead.

(*M.*, III, 11 ; *see* under PARYAṄKA.)



MANJŪSHA

(12) 'Had a maṭha built (maṭhā kaṭṭiśi) for Śiva-Basappa-Svami of the Govi-maṭha.'—(*Ep. Carnat.*, Vol. III, Mysore Taluq, no. 24 ; Transl., p. 3 ; Roman Text, p. 7.)

(13) 'On my king (i.e., husband) going to Svarga, having caused to be erected a maṭha in Kalale and attached it to the great palace, Kurahaṭṭi and Śambhupura are granted as an endowment for it, as an offering to Śiva.' The peculiarities of this maṭha should be noted.—(*Ep. Carnat.*, Vol. III, Nanjangūḍ Taluq, no. 81 ; Transl., p. 103 ; Roman Text, p. 196.)

(14) 'Having erected a maṭha (Sattra or alms-house) for the distribution of food to those who come to the car-festival of the god. . . , caused his guru to take up his residence in the king's maṭha (a detached residential building which belongs to a house and is intended for receiving and accommodating the guests) to conduct the worship of Chandraśekhara (who might be installed in a maṭha or temple which, however, does not occur in the present inscription) and to minister to the Jangamas, and give shelter and food to mendicants and pilgrims, . . . in order to meet all the expenses of the same made a grant of Hāranahaḷḷi.'—(*Ep. Carnat.*, Vol. IV, Hunsūr Taluq, no. 104 ; Transl., p. 93 ; Roman Text, 15.)

The different meanings of the term 'maṭha' noted within brackets in the above passage should be noted.

(15) 'He had the stone-fort built, together with the maṭha, maṇṭapa, pond, well . . . '

'In the evening-maṭha (sāndhya-maṭha) he set up the image of the god and built the pond.'

'He caused the stone-fort to be built, and set up the maṭha, maṇṭapa, evening-maṭha (sāndhya-maṭha), pond, well, Basava pillar, swing and images of gods.'—(*Ep. Carnat.*, Vol. V, Part I, Channarayapatna Taluq, nos. 158, 160, 165 ; Transl., pp. 195, 196, 198 ; Roman Text, pp. 450, 451, 454.)

(16) Śri-Śaṅkarāchārya-vinirmite lasat-siṁhāsane dharmamaye maṭhe subhāḥ . . .

'He made petition at the feet of Vidyāraṇya Śrī-pāda, representing that in Śṛiṅgapura, in (connexion with) the dharmapīṭha (or religious throne) established by Śaṇkarāchāryya, there must be a maṭha and agrahāra.'—(*Ep. Carnat.*, Vol. VI, Śṛingeri Jagir, no. II ; Roman Text, p. 195, line 12 f. ; Transl., p. 95, last para.)

This maṭha is mentioned in no. 13 and is called Śri-maṭha in nos. 25, 26 and 31. Of this maṭha, Mr. Rice gives a history and says that 'the head of the Śṛingeri maṭha is styled the jagad-guru or the guru of the world and is possessed of extensive authority and influence. He wears on ceremonial occasions a tiara like the Pope's, covered with pearls and precious stones . . . , and a handsome necklace of pearls, with an emerald centre piece.' (Introd., p. 24, para. 2.) But no architectural details are given.

(17) 'This temple is a Brahma-chāri-maṭha.—(*Ep. Carnat.*, Vol. VII, Shikarpur Taluq, no. 242; Transl., p. 140, line 7; Roman Text, p. 248, lines 20–21.)

(18) Vinīteśvara-maṭha-samāveśaṁ maṭham etat kāritam Śri-Nārāyaṇa-devakulasya—'built this maṭha of the deva-kula of Nārāyaṇa, near the temple of Vinīteśvara.'—(Mundeśvari inscrip. of Udayasena, lines 5, 6; *Ep. Ind.*, Vol. IX, pp. 219–290.)

MAṆIKA—A water-jar, a class of buildings.

A class of buildings which are oval in plan and sub-divided under the following names:

(1) Gaja, (2) Vṛishabha, (3) Haṁsa, (4) Garutman, (5) Ṛikshanāyaka, (6) Bhūshaṇa, (7) Bhū-dhara, (8) Śrījaya, and (9) Pṛithīvīdhara:

(1) *Agni-Purāṇa* (Chap. CIV, v. 11, 19–20; *see* under PRĀSĀDA).

(2) *Garuḍa-Purāṇa* (Chap. XLVII, vv, 29–30; *see* under PRĀSĀDA).

Cf. Rock inscriptions at Mulbe (no. IV, *Ind. Ant.*, Vol. XXXV, pp. 79, 80).

MAṆI-GRĀMA—A trading corporation. (Note on Tamil Inscription in Siam, E. Hultzsch, *J. R. A. S.*, 1913, pp. 337–339.)

MAṆI-DVĀRA—A kind of top door or window.

Uparishṭāt trayāṁśaṁ tu chatvārārdhāṁśaṁ dvi-pārśvayoḥ ।
Teshāṁ madhye tu yad dvāraṁ maṇi-dvāram ihochyate ॥

(*Kāmikāgama*, LV, 43.)

MAṆI-BANDHA—An ornament for the wrist, a string of pearls, the collet.

Prakoshṭhe valayaṁ chaiva maṇi-bandha-kalāpakam ।

(*M.*, L, 16.)

Maṇi-bandha-kaṭakaṁ vā mauktika-chūḍam eva cha ।

(*M.*, LIV, 14.)

Prakoshṭha-valayaṁ chaiva valayair maṇi-bandhakaih

(*Ibid.*, 99, etc.)

MAṆI-BHADRA (*see* MAṆḌAPA)—A pavilion with 64 columns.

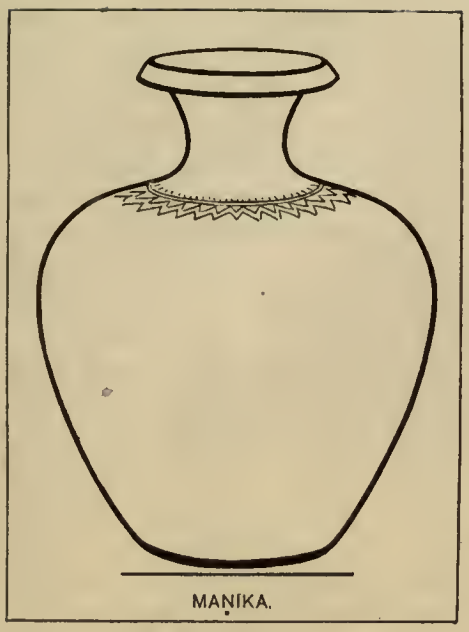
(*Suprabhedāgama*, XXX, 101, 103; *see* under MAṆḌAPA.)

MAṆI-BHITTI—The residence of the great serpent (Śesha-nāga).

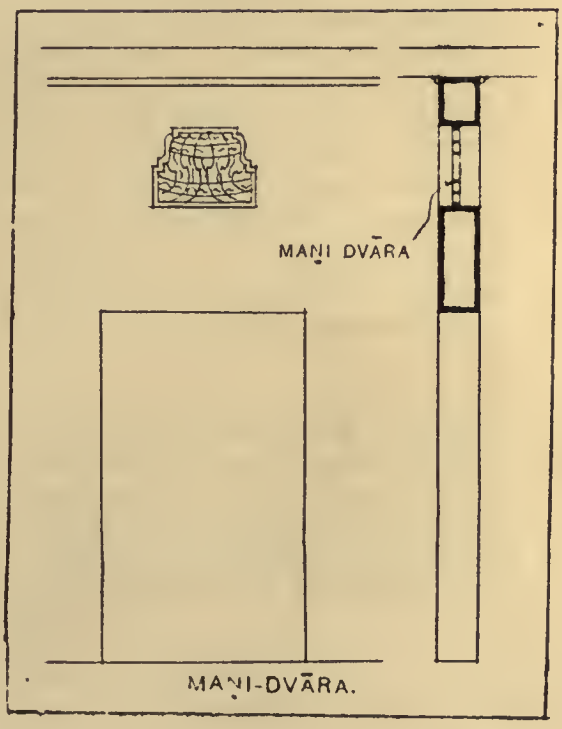
MAṆI-BHŪ-(MI)—A floor inlaid with jewels.

MAṆI-MAṆḌAPA—A jewelled pavilion, the residence of the great serpent (Śesha-nāga).

MAṆI-HARMYA—An upper storey, a crystal palace, a jewelled mansion. (*See Artha-śāstra* under GṚIHA-VINYĀSA.)



MAṆIKA.



MAṆI-DVĀRA.

MAṆḌAPA—A detached building, a pavilion, an open hall, an arbour, a corridor (*M.*, XXXIV, 406, 409, 414, etc.), a tower, a temple, the auditorium in a theatre (*Bharata-Nāṭya-śāstra*, II, 7–8, 22; *see* details under NĀṬYA-GṚIHA(VEŚMA).

Atha maṇḍapo'strī janāśrayaḥ I—(*Amarakôsha*, 2, 2, 9.)

'Maṇḍapas are not furnished with walls; the roofing is formed of large slabs of granite supported by monolithic pillars.'—(D. A. Iyengar, p. 20.)

'The resting place where the gods are every year (occasionally) carried. The most celebrated part of the temple of Madura is the Pudu maṇṭapam which is only a vast corridor.'—(*Ibid.*, p. 38.)

Difference between Maṇḍapa and Sabhā (*M.* XXXIV, 559–562): the former having a pent-roof, and the latter pinnacled (i.e. spherical roof).

(1) *Mānasāra* (Chap. XXXIV, 1–578, named Maṇḍapa):

Maṇḍapa generally means a temple, bower, shed or hall. But the term has been used in three technical senses in this chapter.

It implies in the first place a house in the village, etc., or built on the bank of a sea, river, tank or lake; secondly, the detached buildings in a compound which is generally divided into five courts (*see* PRĀKĀRA). But in the most general sense, it implies various sorts of rooms in a temple or residential buildings. The most part of this long chapter is devoted to a description of these rooms.

Maṇḍapas are both temples and residential buildings:

Taita(-ti)lānāṁ dvi-jātīnāṁ varṇānāṁ vāsa-yogyakam I

The general comparative measurement of the maṇḍapas is discussed at the beginning. This is followed by the measurement and other descriptions of (ii) the bhitti (wall), (iii) balcony (alinda), (iv) prapā (alms-house), and (v) the form of the maṇḍapas (lines 3–4).

Seven maṇḍapas are, as stated, built in front of the prāsāda or the main edifice (line 157). They are technically called Himaja, Nishadaja, Vijaya, Mālyaja, Pāriyātra, Gandhamādana and Hema-kūṭa (lines 163–156). Various parts of these, such as walls, roofs, floors, balconies, courtyards, doors, windows, pillars, etc., are described in detail (lines 166–175). Besides these seven, various other maṇḍapas are also described in accordance with their architectural details and the various purposes for which they are built.

Meruja maṇḍapa is for the library-room (line 161), Vijaya for wedding ceremonies (line 163), Padmaka for refectory or kitchen of gods (line 174), Sicha for ordinary kitchen (line 175), Padma for collecting flowers (line 181), Bhadra for water reservoir, store-house, etc. (line 185), Śiva for unhusking paddy corn (line 197), Veda for assembly-hall (line 209), Kula-dhāraṇa for keeping perfumes (line 262), Sukhāṅga for guest-house (sattra,) (line 272), Dārva for elephant's stable, and Kausika for horses'

stable, Saukhyaka and others built on the bank of a sea, river, lake, etc., are for the pilgrimage of gods (line 281), Jayāla and others for summer residence (line 294). Some maṇḍapas are made for banishment (*see* below), some for bedrooms of queens and others. Dhanada (line 328), Bhūshaṇa (lines 349, 366), Kharvaṭa (lines 455, 472), Droṇa (lines 423–434), Śrirūpa (line 480), Maṅgala (line 488), etc., are described under these terms.

The plan, ornaments, etc., of maṇḍapas are described in detail. A description of the forms of maṇḍapas is given (lines 549–557). The maṇḍapas (rooms) of temples and of the houses of the Brāhmaṇās should have the Jāti shape; the Chhanda shape is given to the maṇḍapas of the Kshattriyas, the Vikalpa shape to those of the Vaiśyas, and the Ābhāsa shape to those of the Śūdras. But according to some, these four classes are also based on the form of the Bhadra (portico).

The maṇḍapas of two faces are called daṇḍaka, of three faces svastika, the latter one having also the plough shape; the maṇḍapas of four faces are known as chatur-mukha, of six faces maulika, and of five faces sarvatobhadra (lines 554–556).

A short description of the maṇḍapas in a village or town is also given (lines 558–572). Their principal members are stated to be the lupā (pent-roof), prastara (entablature), prachchhādana (roof), sabhā (council hall), and kūṭa (dome), etc. Maṇḍapas are also built on the roadside and at other places.

All the maṇḍapas mentioned above are separately described as they belong to a temple or to the houses of the Brāhmaṇās, the Kshattriyas, the Vaiśyas, and the Śūdras respectively (*cf.* lines 571–578).

Cf. the following :

The detached buildings or attached halls for various purposes :

Some bhallāṭa-mukhye cha kalpayet kośa-maṇḍapam ।
Pushpa-dante sūkarau cha śāstra-maṇḍapa-saṁyutam ।
Varuṇe vāsure vāpi vastu-nikshepa-maṇḍapam ।
Nāge vāpi mṛige vāpi deva-bhūshaṇa-maṇḍapam ।
Ā(a)ditau choditau vāpi śayanārthaṁ cha maṇḍapam ।
Āsthāna-maṇḍapaṁ chaiva chatur-dikshu vidikshu cha ।
Snāpanārthaṁ maṇḍapaṁ snāna-maṇḍapam eva cha ।
Gṛiha-kshate yame vāpi vāhana-sthāna-maṇḍapam ।
Maryādi-bhittikasyāntam maṇḍapaṁ pavanālayam

(*M.*, xxxii, 68–76.)

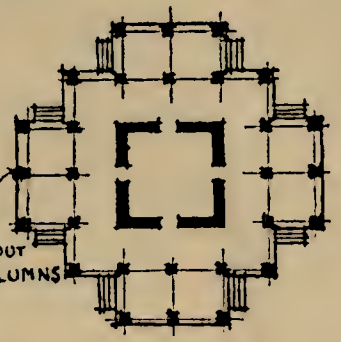
Dakshiṇe nairṛiti vāpi bhojanārthaṁ tu maṇḍapam ।
Vāyavyena dhanāṅgāṁśe pushpa-maṇḍapa-(ṁ) yojayet ।
Tat-tad-bāhya-pradeśe tu kāya-śuddhyartha-maṇḍapam ।
Vāyavye nairṛite vāpi sūtikā-maṇḍapaṁ bhavet ।

(*M.*, xl, 98, 102, 104, 105.)

THE PAVILIONS

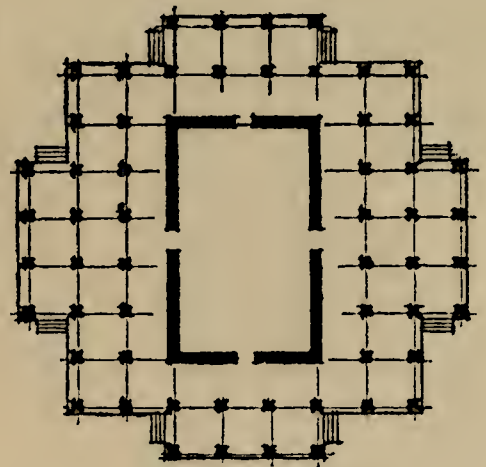
NOTE:-

THE PAVILIONS HIMAJA NISHADAJA VINDHYAJA SHOULD BE BUILT IN FRONT OF A MAIN EDIFICE

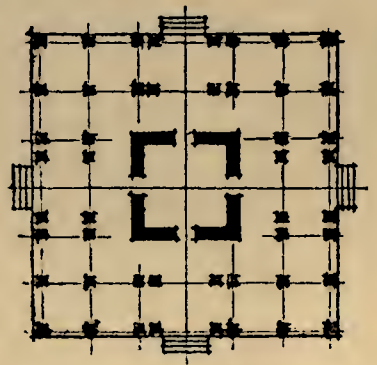


IN HIMAJA TYPE, NOTHING ABOUT THE OMISSION OF MIDDLE COLUMNS IS MENTIONED

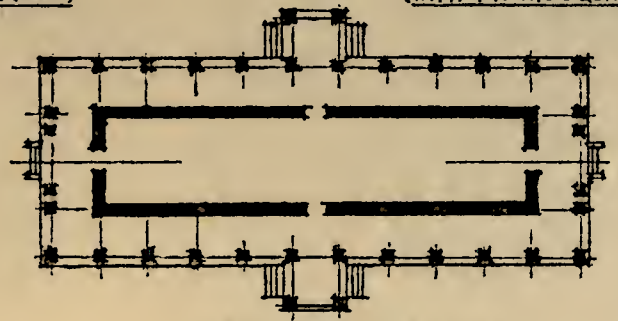
HIMAJA PAVILION
(WITH 4 PARTS SQUARE)



VINDHYAJA PAVILION
(WITH 7 PARTS SQUARE)



NISHADAJA PAVILION
(WITH 6 PARTS SQUARE)



MERUJA PAVILION (11×4 PARTS)
(TO BE USED AS A STACK ROOM OF A LIBRARY)

The height :

Maṇḍapaṁ nava-talaṁ kuryád . . . ।

(*M.*, xi, 144.)

Iśānādi-chatush-karṇe maṭhaṁ vā maṇḍapam tu vā ।

(*M.*, ix, 138.)

Maṇḍapādi cha bhūpānāṁ veśma kuryāt tu pūrvavat ।

(*Ibid.*, 445.)

In connexion with columns :

Prāsāde maṇḍape vāpi prākāre gopure tathā ।

(*M.*, xv, 433.)

Cf. Āyuda-maṇḍapa (*M.*, xxxvi, 34), v(b)ālālokana-maṇḍapa (*ibid.*, line 48), vivāha-maṇḍapa (line 49), vastrāchchhādana-maṇḍapa (line 50), vidyābhyāsārtha-maṇḍapa (line 53), tailābhyaṅgārtha-maṇḍapa (line 54), āsthāna-maṇḍapa (line 55), vilāsārtha-maṇḍapa (line 56), dhānya-karshaṇa-maṇḍapa (line 69), pushpa-maṇḍapa (line 71), nṛitya-yogya-maṇḍapa (line 74), nityārchana-maṇḍapa (line 79), etc.

Some maṇḍapas are stated to be furnished with 100 or 1,000 columns :

Śata-pāda-yutaṁ vātha sahsrāṅghrika-maṇḍapam ।

(*M.*, xxxiv, 240.)

(2) Bandha-sthānaṁ bahiḥ kuryāt snāna-maṇḍapam eva cha ।

(*Matsya-Purāṇa*, Chap. cclvi, v. 35.)

Prāsādasyottare vāpi pūrve vā maṇḍapo bhavet ॥

Chaturbhis toraṇair yukto maṇḍapa-(ḥ) syāch chatur-mukhaḥ ॥

(*Ibid.*, Chap. cclxiv, vv. 13, 15.)

'The maṇḍapa should be built to the north or east of the temple. It should have four faces (façades) and be furnished with four arched gateways (*lit.* arches).'

Athātaḥ saṁpravakshyāmi maṇḍapāṇāṁ tu lakshaṇam ।

Maṇḍapa-pravarān vakshye prāsādasyānurūpataḥ ॥ (1)

Vividhā maṇḍapāḥ kāryā jyeshṭha-madhya-kaniyasāḥ ।

Nāmas tān pravakshyāmi śṛiṇudhvam ṛishi-sattamāḥ ॥ (2)

Then follow the names of twenty-seven maṇḍapas. They are divided according to the number of columns they are furnished with, the largest one having 64 pillars, the next 62, one following 60, and so on :

(1) Pushpaka, (2) Pusha-bhadra, (3) Suvrata, (4) Amṛitanandana, (5) Kauśalya, (6) Buddhi-saṁkīrṇa, (7) Gajabhadra, (8) Jayābaha, (9) Śrīvatsa, (10) Vijaya, (11) Vāstu-kīrti, (12) Śrutiṁjaya, (13) Yajña-bhadra, (14) Viśāla, (15) Suślishṭa, (16) Śatru-mardana, (17) Bhāga-pañcha, (18) Nandana, (19) Mānava, (20) Māna-bhadraka, (21) Sugrīva, (22) Harita, (23) Karṇi-kāra, (24) Śatardhika, (25) Siṁha, (26) Śyāma-bhadra, and (27) Subhadra.

The plans of maṇḍapas are given next :

Tri-koṇaṁ vṛittam ardhendum ashṭa-koṇaṁ dvir-ashṭakam ।
Chatush-koṇaṁ tu kartavyaṁ saṁsthānaṁ maṇḍapasya tu ॥

(*Matsya-Purāṇa*, Chap. CCLXX, vv. 1, 2, 3–6, 7–15, 16.)

(3) Bhitter dvaiguṇyato vāpi karttavyā maṇḍapāḥ kvachit ।

(*Garuḍa-Purāṇa*, Chap. XLVII, v. 37.)

Prāsādasyāgrataḥ kuryān maṇḍapaṁ daśa-hastakam ॥
Kuryād dvā-daśa-hastaṁ vā stambhaiḥ shoḍaśabhir yutam ।
Dhvajāshṭakaiś chatur-hastāṁ madhye vediṁ cha kārayet ॥

(*Ibid.*, Chap. XLVIII, vv. 4–5.)

(4) Āhūya viśva-karmmāṇaṁ kārayāmāsa sādaram ।
Maṇḍapaṁ cha suvistīrṇaṁ vedikābhir manoramam ॥ (2)

Description of its carving hand paintings :

Jalaṁ kiṁ nu sthalaṁ tatra na vidus tattvato janāḥ ।
Kvachit siṁhāḥ kvachid-dhaṁsāḥ sārasāś cha mahā-prabhāḥ ॥ (6)
Kvachich chhikhaṁḍinas tatra kṛitrimā sumanoharāḥ ।
Tathā nāgāḥ kṛitrimāś cha hayāś chaiva tathā mṛigāḥ ॥ (7)
Ke satyāḥ ke asatyāś cha saṁskṛitā viśva-karmaṇā ।
Taithaiva chaivaṁ vidhinā dvāra-pāda-bhūtāḥ kritāḥ ॥ (8)
Rathā rathi-yutā hy-āsan kṛitrimā hy-akṛitopamāḥ ।
Sarveshāṁ mohanārthāya tatha cha saṁsadaḥ kṛitaḥ । (13), etc.
Evaṁbhūtaḥ kṛitas tena maṇḍapo divya-rūpavān ॥ (20)

(*Skanda-Purāṇa*, Māheśvara-khaṇḍa-prathama, Chap. XXIV, vv. 2, 6, 7, 8, 13, 20 ; for further description *see* vv. 36–67.)

Rathasyeśāna-dig-bhāge śālāṁ kṛitvā suśobhanām ।
Tan-madhye maṇḍapaṁ kṛitvā vedim atra sunirmalām ॥

(*Ibid.*, Vaishṇava-khaṇḍa-dvitīya, Chap. XXV, v. 26.)

(5) Eka-dvi-tri-talopetaṁ chatush-pañcha-talaṁ tu vā ॥
Maṇḍapaṁ tu vidhātavyaṁ sālānām agra-deśake ॥

(*Kāmikāgama*, XXXV, 96, 96*a*.)

(6) Maṇḍapas implying the detatched buildings and forming part of a temple—(*Suprabhedāgama*, XXXV, 94–104).

Measurement as compared with the temple :

Prāsāda-lakshaṇaṁ proktaṁ maṇḍapānaṁ vidhiṁ śṛiṇu ॥ (94)
Prāsādārdhaṁ mukhāyāmaṁ vistāraṁ samam uchyate ।
Tri-pādaṁ vā mukhāyāmaṁ sārdhaṁ maṇḍapam uchyate ॥

Classification :

Devatā-maṇḍapaṁ pūrvaṁ dvitīyaṁ snapanārthakam ।
Vṛishārthaṁ maṇḍapaṁ paśchāch chaturthaṁ nṛitta-maṇḍapam ॥ (96)

Description of these four classes of maṇḍapas :

Devatā-pratimā-rūpā(-aṁ) sthāpitaṁ deva-maṇḍapam ।
Kalaśa-sthāpanaṁ yatra proktaṁ snapana-maṇḍapam ॥ (97)
Vṛishabha-sthāpitaṁ yatra vṛishabha-maṇḍapaṁ tathā ।
Nṛittaṁ yatra kṛitaṁ tat tu nṛitta-maṇḍapam eva tu ॥ (98)
Gopure'tha vāyavye'pi vāyavye vikṛitaṁ tathā ।
Evaṁ chatur-vidheshv-anya-maṇḍapaṁ chāgrato bahiḥ ॥ (99)

Their names :

Teshāṁ nāmāni vakshyāmi śṛiṇu vatsa samāhitaḥ ।
Nanda-vṛittaṁ śriyā-vṛittaṁ vīrāsanaṁ cha vṛittakam ॥ (100)
Nandyāvartam maṇi-bhadraṁ viśālaṁ cheti kīrttitam ।

Their characteristic features :

Nanda-vṛittaṁ chatush-padaṁ shoḍaśaṁ śrīpratishṭhitam ॥
Viṁśati-stambha-saṁyuktaṁ vīrāsanam iti smṛitam ।
Dvātriṁśad-gātra-saṁyuktaṁ jaya-bhadram iti kathyate ॥
Shaṭ-triṁśad-gātra-saṁyuktaṁ nandyāvartam iti smṛitam ।
Chatuḥ-shashṭi-samāyuktaṁ stambhānāṁ maṇi-bhadrakam ॥
Stambhānāṁ tu śatair yuktaṁ viśālam iti saṁjñitam ।
Prāsāda-vat samākhyātaṁ prastarāntaṁ pramāṇataḥ ॥ (104)

(*Suprabhedāgama*, xxxv, 94–104.)

Then follows an account of these columns (*ibid.*, vv. 105–108 ; *see* under STAMBHA).

Kauṭilīya-Artha-śāstra (Chap. xxii, p. 46, footnote) :

(7) Ardha-gavyūta(-ti)-tritīyān ar-grāmāntara-rahitaṁ maṇḍapam ।

(*Rāyapasenī-sūtra-vyākhyāne*, p. 206.)

(8) Maṇḍapāni dūra-sthala-sīmāntarāṇi ।

(*Praśna-vyākaraṇa-sūtra-vyākhyāne*, p. 306.)

(9) *See* the first Praśasti of Baijnath (v. 29, *Ep. Ind.*, Vol. i, p. 106), also the second Praśasti (v. 25, pp. 114, 117).

(10) Someśvarāya tan-maṇḍapam uttareṇa—' to the north of the hall of the temple of Someśvara.'—(Chintra Praśasti of the reign of Sarangadeva, v. 40, *Ep. Ind.*, Vol. i, pp. 284, 276.)

(11) A hall for the supply of water (inscrip. of Chandella Viravarmanl v. 19, *Ep. Ind.*, Vol. i, pp. 328, 330).

(12) A chapel (Harsha stone inscrip., vv. 12, 44, *Ep. Ind.*, Vol. II, pp. 121, 124, 126, 128).

(13) Nārāyaṇasyāyatanaṁ . . . saha maṇḍapena—the temple of Nārāyaṇa together with the hall.—(Khalari Stone inscrip. of Haribrahmadeva, v. 10, *Ep. Ind.*, Vol. II, p. 231.)

(14) Someśvara-maṁḍapa—the temple of Somanath.—(Śrīdhara's Devapattana Praśasti, v. 23, *Ep. Ind.*, Vol. II, p. 442 ; *see also* v. 10, p. 440.)

(15) Maṇṭapa (the Kanarese form)—a hall.—(Satymangalam Plates of Devaraya II, v. 8, *Ep. Ind.*, Vol. III, pp. 37, 40.)

(16) Śri-vallādhipateś śivasya sukhadaṁ bhadrahvayaṁ maṇḍapam
. . . akarod bhadrāhvyaṁ maṇḍapam . . . ||
Bhadrākhya-maṇḍapam(muṁ) virachyya Śambhor nidrāvasāna-
vijayiti cha nāma kṛitvā |
Chakre cha Nāyaka-śivālayam asya pārśve śrī-jñāna-mūrttir atisampadi-valla-puryyām ||

(Bilvanatheśvara inscrip. of Virachampa, vv. 1, 2, 3, *Ep. Ind.*, Vol. III, pp. 70, 71.)

(17) Dhāma, Maṁdira, Prāsāda and Bhāvana are used indiscriminately for temple or maṇḍapa.—(Ganapesvaram inscrip. of Ganpati, vv. 23–25, *Ep. Ind.*, Vol. III, pp. 86–87).

(18) Abhyavahāra-maṇḍapa—a dining hall.—(Ranganath inscrip. of Sundarapandya, v. 23, *Ep. Ind.*, Vol. III, pp. 13, 16.)

(19) 'The immediate purpose of the Ranganatha inscription of Sundarapandya is a description of his building operations at, and gifts to, the temple. He built a shrine of Narasiṁha (vv. 2 and 10) and another of Vishṇu's attendant Vishvaksena (v. 8), both of which were covered with gold, and a gilt tower which contained an image of Narasiṁha (v. 7). Further he covered the (original or central) shrine of the temple with gold—an achievement of which he must have been specially proud, as he assumed, with reference to it, the surname Hema-chchhādana-rāja, i.e., the king who has covered (the temple) with gold, and as he placed in the shrine a golden image of Vishṇu, which he called after his own surname (v. 3). He also covered the inner wall of the (central) shrine with gold (v. 22) and built, in front of it, a dining-hall, which he equipped with golden vessels (v. 23) . . . . . In the month of Chaitra he celebrated the procession-festival of the god (v. 20). For the festival of the gods sporting with Lakshmī, he built a golden ship (v. 21). The last verse (v. 30) of the inscription states that the king built three golden domes over the image of Hema-chchhādana-rāja Hari, over that of Garuḍa (v. 16) and over the hall which contained the couch of Vishṇu (v. 6).'

'The following miscellaneous gifts (for articles of furniture) to Ranganatha are enumerated in the inscription :—A garland of emeralds (v. 4), a crown of jewels (v. 5), a golden image of Śesha (v. 6), a golden arch (v. 9), a pearl garland (v. 11), a canopy of pearls (v. 12), different kinds of golden fruits (v. 13), a golden car (v. 14), a golden trough (v. 15), a golden image of Garuḍa (v. 16), a golden under-garment (v. 17), a golden aureola (v. 18), a golden pedestal (v. 19), ornaments of jewels (v. 24), a golden armour (v. 25), golden vessels (v. 28), and a golden throne (v. 29).'—(Ranganatha inscrip. of Sundarapandya, *Ep. Ind.*, Vol. III, p. 11.)

(20) Kṛishṇālayaṁ maṇḍapam—an abode of Kṛishṇa, an open hall.—(Three inscrip. from Travancore, no. B, line 4 ; *Ep. Ind.*, Vol. IV, p. 203.)

(21) Āsthāna-śilā-maṇḍapa (not translated by Hultzsch).—(First Draksharama pillar inscrip., line 9, *Ep. Ind.*, Vol. IV, pp. 329, 330.)

(22) Ghana-maṇṭapa-vapra-saudha-ramyālayam (v. 39)—'a temple (ālaya) adorned with a solid hall, a wall and a plastered mansion' (pp. 123, 114).

Sudhā-liptaṁ śilā-maṁṭapam (v. 43)—'a plastered hall of stone, (pp. 123, 114).

Vipulaṁ ramyaṁ mahā-maṁṭapam (v. 44)—'a fine large hall, (pp. 123, 114).

Ramyaṁ mahā-maṁṭapam (v. 47)—'a beautiful large hall' (pp. 124, 115).

Ghanaṁ prāsādaṁ nava-hema-kumbha-kalitaṁ ramyaṁ mahā-maṁṭapam (v. 51)—'he presented a solid temple (prāsāda), adorned with nine golden pinnacles (kumbha), and a beautiful large hall, to the temple of Hari' (pp. 125, 115).—(Mangalagiri pillar inscrip., *Ep. Ind.*, Vol. VI, pp. 114, 115, 124, 125.)

(23) Ānandaika-niketanaṁ nayanayoḥ s(ś)asvan manaḥ-kairava-jyotsnaughaḥ khalu viśvakarmma-nipuṇa-vyāpāra-vaidaghdya-bhūḥ ।
Grīshma-grāsa-bhayātibhīta-janatā-śautīrya-durggālayo mārggaḥ kīrttivijṛimbhaṇasya jayinā prottambhito maṇḍapaḥ ॥
(Two Bhuvaneśvara inscrip., no. 1, of Svapneśvara, v. 29, *Ep. Ind.*, Vol. VI, p. 202.)

(24) 'This inscription (Bhimavaram inscrip. of Kulottunga I) is engraved on a pillar in the maṇḍapa in front of the Nārāyaṇasvāmin temple at Bhimavaram in the Cocanada division of the Godavari District.'—(*Ep. Ind.*, Vol. VI, p. 219.)

(25) Utsava-maṁṭapa—a festive hall.—(Kondavidu inscrip. of Krishnaraya, v. 27, *Ep. Ind.*, Vol. VI, pp. 237, 231.)

(26) 'The village of Śivamaṅgalam of the North Arcot District contains a Śiva temple named Stambheśvara, which consists of a rock-cut shrine, two maṇḍapas in front of it, and a stone enclosure. The two rock-cut

pillars of the gate by which the shrine is entered bears the two subjoined inscriptions. Besides, there are several Chola inscriptions on the walls of the enclosure.'—(Dr. Hultzsch. *Ep. Ind.*, Vol. VI, p. 319.)

(27) Maḍapo nava-gabha—a nine-celled hall.

Pāṭho maḍapo—a study.—(Kalre Cave inscrip. no. 20, *Ep. Ind.*, Vol. VII, pp. 71, 72, 73.)

(28) Śrī-Kāñchi-Jina-Vardhamāna-nilayasyāgre mahā-maṇḍapaṁ śaṁ-gītārttham achīkarach cha śilayā baddhaṁ śamantāt sthalam ॥

'Caused to be built, in front of the temple of the Jina-Vardhamāna at the prosperous Kāñchi, a great hall for concerts and (caused to be) paved with stones the space all round.'—(Two Jaina inscrip. of Irugappa, no. B, line 2, *Ep. Ind.*, Vol. VII, p. 116.)

(29) 'Two buildings to be erected in the temple of Arulālanātha (are) a maṇḍapa of one thousand pillars, a canopy of gems for (the image of) Muḍivalaṅginan . . .—(Arulala-Perumal inscrip. of Prataparudra, line 8, *Ep. Ind.*, Vol. VII, pp. 131, 132.)

(30) Śrī-nara-siṁha-varma-nṛipatiḥ Śrī-kovalūre bhajan vāsaṁ viśva-jagan-nivāsa-vapushaḥ Śrī-vāmanasyākarot ।

Śailaṁ śumbhita-śata-kumbha-vilasat-kumbhaṁ mahā-maṇḍapaṁ prākāraṁ para-mālikā-vilasitaṁ muktāmayīṁ cha prapā(-bhā)m ।

'The glorious prince Nara-siṁha-varman, residing in Śrīkovalūra made for the god Vāmana, in whose body the whole world abides, a great maṇḍapa of stone, resplendent with pitchers (kalaśa or kumbha) of shining gold, a surrounding wall, adorned with excellent buildings, and a canopy of pearls.'—(Fourteen inscrip. at Tirukkovalur, no. K, of Rajendradeva, lines 1–2, *Ep. Ind.*, Vol. VII, pp. 145, 146.)

(31) Dhārā-giri-garbha-marakata-maṁḍape—in an emerald pavilion on the Dhārāgiri hill.—(Dhara Praśasti of Arjunavarman, line 12, *Ep. Ind.*, Vol. VIII, pp. 103, 100.)

(32) Tejaḥpāla iti kshitīṁdu-sachivaḥ saṁjjvalābhiḥ śilā-śreṇibhiḥ sphurad iṁdu-kuṁda-ruchiraṁ Nemi-prabhor maṁdiram ।

Uchchair maṁḍapam agrato Jina-(varā)-vāsa-dvi-paṁchā-śataṁ tatpārśveshu balānakaṁ cha purato nishpādayāmāsivān ॥

'The minister Tejaḥpāla, a moon on earth, erected the temple of the Lord Nemi, which shines by lines of stones as white as conch shells (and) is resplendent like the moon and jasmine flowers, a lofty hall (maṇḍapa) in front (of it), fifty-two shrines for the best of the Jinas on the sides of it and a seat (balānaka) in the front.'—(Mount Abu inscrip. no. 1, v. 61, *Ep. Ind.*, Vol. VIII, pp. 212, 218.)

(33) . . . Kāmākshī-dharma-maṇḍape ॥

Pratyabdan dvija-bhukty-arttthaṁ bhāgam ekam akalpayat ॥

'Set apart one share for the yearly feeding of Brāhmaṇas in the Kāmākshi-dharma-maṇḍapa.'—(Madras Museum plates of Śrīgiribhūpāla, vv. 21, 22, *Ep. Ind.*, Vol. VIII, pp. 311, 316.)

(34) 'Māṛaṅgari . . . the prime minister of king Māṛañjaḍaiyan, made this stone temple and ascended heaven (i.e., died) without consecrating it. Subsequently his brother Māṛan, Eyinan . . . who attained to the dignity of prime minister, made the mukha-maṇḍapa (muga-maṇḍapan) and consecrated (the shrine).'—(Two Anaimalai inscrip., no. II, *Ep. Ind.*, Vol. VIII, pp. 320, 321.)

(35) *Cf.* Maṇḍapikā (*lit.*, a small pavilion) :

Śrī-Naddūla-mahā-sthāne Śrī-Saṁḍeraka-gachchhe Śrī-Mahāvīradevāya Śrī-Nāddūla-talapada-śulka-mamdapikāyāṁ māsānumāsaṁ dhūpa-ve(tai)lārtham ।

'Granted to the Jaina temple of Mahāvīradeva in the Saṇḍerak gachchha, at the holy place (Mahāstlıāna) of Naddūla, a monthly (sum of five drammas), (to be paid) from the custom-house in the grounds (talapada-svatala) of Naddula.'

For passages in which the term Maṇḍapikā occurs, compare, c. g., *Ep. Ind.*, vol. I, pp, 114, 1–27 p. 173, 1–6, (Śīyaḍoṇi-Satka-maṇḍapikā), p. 175, 1, 19 ; p. 177, 1, 29 and 1, 30 ; p. 179, 1, 45 ; p. 262, 1, 3 (paṭṭana-maṇḍapikā) ; *Ind. Ant.*, vol. XIV, p. 10, col. 2 (Śrīpathāstha-maṇḍapikā) ; *Journ. As. Soc. Beng.*, vols. LV, part I, p. 47 ; IV, p. 48, and v. ; Bhavnagar inscrip., p. 205, 1, 7. Śulka-maṇḍapikā occurs, e. g., in Bhavnagar inscrip., p. 158 f., 11, 10, 15 and 18.

'The meaning of maṇḍapikā is suggested by the Marāṭhī māṁdavī, a custum-house.' Prof. Kielhorn.—(The Chahamanas of Naddula, no. A, Nadol plates of Alhanadeva, lines 22–23, *Ep. Ind.*, Vol. IX, pp. 66, 63, and note 8.)

(36) . . . Vidadhe' syā maṁdire maṁḍapam ॥

Chakre'(a)kshaya-tṛitīyayāṁ pratishṭhā maṁḍape dvijaiḥ ॥

(Chahamanas of Naddula, no. C., Sundhā Hill inscrip. of Chāchigadeva, vv. 56, 57, *Ep. Ind.*, Vol. IX, p. 79.)

(37) Deva-Śrī-Śaśi-bhushaṇasya kṛitinā devālayaṁ kāritaṁ yugmaṁ maṁḍapa-śobhitaṁ cha purato-bhadraṁ pratolyā saha ।

Kshetreśasya tathā surālaya-varaṁ sphītam taḍāgaṁ tathā bandhaṁ Kauḍika-saṁjñakaṁ bahu-jalaṁ dīrghaṁ tathā khānitam ॥

(Kanker inscrip. of Bhanudeva, v. 7, *Ep. Ind.*, Vol. IX, p. 127.)

(38) Kamanīya-śilā-stambha-kadaṁbottaṁbitāṁvaram ॥

Viśaṁkaṭa-viṭaṁkāli-virājad raṁga-maṁṭapam ।

'It is a large raṅgamaṇḍapa raised on a collection of beautiful stone pillars and adorned with rows of spouts.'—(Krishnapuram plates of Sadāśivaraya, vv. 55, 56, *Ep. Ind.*, Vol. IX, pp. 336, 341.)

(39) Pāhinī maṁḍapa kāranīyaḥ Akshasāmalāpanīyaḥ ḍamā karttavyā pāshāṇa-iṭakāyam ghaṭitaḥ . . . ।

'Pahini (the architect) constructed the maṇḍapa, aksha-sāma (?), and ḍamā (?) with stones and bricks.'—(The Chahamanas of Marwar, no. XIII, Sāṇḍerava stone inscrip. of Kelhanadeva, line 2 f., *Ep. Ind.*, Vol. XI, p. 48.)

(40) 'This inscription (the Chahamanas of Marwar, no. XVII) . . . is incised on a pillar in the Sabhā-maṇḍapa of the temple of Mahāvīra.'—(*Ep. Ind.*, Vol. XI, p. 51.)

(41) Abhinava-nishpanna-prekshā-madhya-maṁdape . . . ।
Suvarṇṇamaya-kalaśāropaṇa-pratishṭhā kṛitā ।

'The ceremony of placing a golden cupola on the newly made central hall, intended for dramatic performances was carried out.'—(The Chahamanas of Marwar, no. XIX, Jalar stone inscrip., lines 5, 6, *Ep. Ind.*, Vol. XI, p. 55.)

(42) Tenochchair bbodhi-maṇḍe śaśi-kara-dhavalaḥ sarvvato maṇḍapena kāntaḥ prāsāda esha smara-bala-jayinaḥ kārito loka-śāstuḥ ॥

'By him this beautiful mansion of the Teacher of mankind, who overcame the power of (the god) Smara, dazzling white as the rays of the moon with an open pavilion on all sides, has been caused to be made at the exalted Bodhi-maṇḍa' (also called Vajrāsana, the miraculous throne under the Bodhi-tree at Bodh-Gaya, on which Buddha sat, when attaining Bodh or perfect wisdom.)—(Bodh-Gaya inscrip. of Mahanaman, lines 10–11 *C. I. I.*, Vol. III, F. G. I., no. 71, pp. 276, 278, 275 ; also Sanskrit and Old Canarese inscrip. no. 166, Bodh-Gaya inscrip. of Mahanaman, line 10 f., *Ind. Ant.*, Vol. XV, pp. 358, 359.)

(43) 'There are several other inscriptions in the outer parts of the (Velur) temple, viz., two on the pedestals of the two dvāra-palākas in front of the gopura, one on the left outer wall of the inner prākāra, and five on the floor of the alaṁkāramaṇḍapa.'—(*H.S.I.I.*, Vol. I, p. 127, first para.)

(44) 'We the great assembly of Manimangalam, . . . being assembled, without a vacancy in the assembly, in the large maṇḍapa (of) the Brahmasthāna in our village . . . '—(Inscrip. of Virarajendra I, no. 30, line 36, *H.S.I.I.*, Vol. III, p. 70.)

(45) 'Brahmapriyan . . . caused to be made the stone work of a flight of steps, with tiger's head at the bottom, for the abhisheka-maṇḍapa in the temple of Vaṇḍuvarāpati Emberumaṇ at Manimangalam . . . '—(Inscrip. of Rajaraja III, no. 39, *H.S.I.I.*, Vol. III, p. 86.)

(46) Śri-kuśala-maṇḍapādi-yukta-rājaka-mālā karākhya-padma-karābhirāma-nūtana-oṁkāreśvara-deva-sthānam ।

'A beautiful new Oṁkāreśvara temple, a lotus ornament to the earth, which with its skilfully designed maṇṭapas, etcetera, might be called a royal lotus.'—(*Ep. Carnat.*, Vol. I, pp. 38, f., 61.)

(47) 'This is the sacred marriage hall (Kalyāṇa-maṇḍapa) built (on the date specified) by Tirukkaṇam Ayyā Mudeliyār's son Vedagiri Mudeliyār for the god Śrī-Śubharāya Subhāmiyār of Alaśur.'

'This inscription is at Halasur, on the basement of the Kalyāṇa-maṇḍapa in the prākāra of the Subrahmaṇya temple.'—(*Ep. Carnat.*, Vol. IX, Bangalore Taluq, no. 14 ; Roman Text, p. 8 ; Transl., p. 7.)

(48) 'This is the outer maṇḍapa (? Churru-maṇḍapam) called Śrī-Rājendra-Śola-devar after the name of (the king) Śrī-Rājendra-Śola-devar, caused to be erected by Jakkiyappai, daughter of Tirbhuvanaiyam of Iṭṭakirai, at the foot of Sulkal-malai, otherwise called Kanaka-parvvatam (the golden mountain) in the Kaḍambanākkai-nāḍu.'—(*Ep. Carnat.*, Vol. X, Kolar Taluq, no. 115 ; Roman Text, p. 49 ; Transl., p. 44.)

(49) 'Agrahāra village, maṇṭapas, maṇṭapas for alms (bhikshā-maṇṭapa), and all other religious provisions' . . .—(*Ibid.*, Vol. X, Mulbagal Taluq, no. 2; Roman Text, p. 82; Transl., p. 71.)

(50) 'Caused to be built in the temple of Jayambu-nāyakar the dancing hall (nirutta, i.e., nṛitta-maṇḍapam), the vestibule (nāḍai-maligai), the surrounding hall and the tower.'—(*Ep. Carnat.*, Vol. X, Bowringpet Taluq, no. 38*a*; Roman Text, p. 175 ; Transl., p. 146.)

(51) Varadarāja-devara-mukha-maṇṭapada-sannidhiyalu Rājagambhiran emba kottalavanu.'

'In proximity to the maṇṭapa facing the god Varadarāja having erected the bastion named Rājagambhīra.'—(*Ep. Carnat.*, Vol. X, Malur Taluq, no. 1 ; Roman Text, p. 186 ; Transl., p. 155.)

(52) 'That Singa-Rāja had the two lines of fortification, round this city built, and holding the office of paṭṭana-svāmī by order of the god Nāyinār, so that all the people could see, for the god's tirumāna had maṇṭapas made before and behind the temple (hindaṇa-mundaṇa-bhāgada maṇṭapa), had a pond constructed called after Gopa Rāja the Gopa-samudra, had a palace built for Gopa Raja to the west of that pond, and to the right of the god, Singa-Rājā's palace ; and that he might at sunrise and at evening twilight bathe at both times, and have a room for domestic sacrifice, from the threshold of which he might look to the spire of Varada Rāja's temple . . . and at the eastern gopura which Kundapa-daṇṇāyaka had built in front of the maṇṭapa facing the god (mukha-maṇṭapa).'—(*Ibid.*, no. 4 ; Roman Text, p. 187 ; Transl., p. 156.)

(53) 'Śeṭṭi Devan built a beautiful stone temple with a maṇṭapa in front of it.'—(*Ep. Carnat.*, Vol. X, Chintamani Taluq, no. 83 ; Transl., p. 258, para. 2.)

(54) ' That the king Prauḍha-Rāya (on the date specified, A.D.) 1426 being in the dāna-maṇṭapa, in the presence of the god Virūpāksha on the bank of the Tungabhadrā, for the purpose of making the great Kalpalatā gift. . . .'—(*Ep. Carnat.*, Vol. xii, Tumkur Taluq, no. 11 ; Transl., p. 5, para. 2.)

(55) ' Caused to be made the Honnā-devī-maṇṭapa.'

This expression is like those, as Vishṇu-maṇḍapa, where maṇḍapa is a detached shrine or temple.—(*Ibid.*, no. 26 ; Transl., p. 8.)

(56) ' His wife (with various praises) Kallarasiyamma, had the shrine of the god Sidda-Mallikārjuna renewed, and having the whole (temple) strengthened, had the two domes built, and the plastering done, had a portico made to the front of the temple, erected a bhoga-maṇḍapa. . . and building a tower and a hall for the god, made a grant of land to provide for the offerings (specified).'—(*Ibid.*, Gubbi Taluq, no. 29 ; Roman Text, p. 41, middle ; Transl., p. 23, line 6.)

(57) ' Presented at the feet of the god Chandra-śekhara the processional form of the god Śaṅkareśvara, a dīpamāle pillar, and a pātāla-maṇṭapa.' —(*Ep. Carnat.*, Vol. xii ; Tiptur Taluq, no. 70 ; Transl., p. 57.)

(58) ' At the time of the eclipse of the sun, in the presence of the god Virūpāksha on the bank of the Tungabhadrā, in the mukti-maṇṭapa to the sacrificer Nāganātha (descent, etc., stated), he granted the Timaḍuga village.'—(*Ep. Carnat.*, Pavugada Taluq, no. 4, Transl., p. 117 ; Roman Text, p. 193, f.)

(59) ' In the antarāla (interior) they erected a most beautiful raṅga-maṇṭapa, and a fine chandra-śāle (upper storey) according to the directions given by the king Timmendra.'—(*Ibid.*, Vol. xii, Pāvugada Taluq, no. 46 ; Transl., p. 122, line 14 ; Roman Text, p. 203, v. 9.)

(60) ' Kailāśādres svatulyaṁ kalita-śuchi-guṇaṁ śrīmati śrī-śuchindre
Vañchī-bhū-pāla-chuḍā-maṇir akṛita puro-maṇḍape chandra-mauleḥ ||

' Rāmavarmā, the crowning gem of the Vañchī sovereigns, constructed the front maṇḍapa of the moon-crested (Śiva) at Śuchīndram, equalling Kailāśa in splendour, and full of the purest qualities.'—(Inscrip. in the Pagodas of Tirūkurunguḍi, in Tinnevelly and of Śuchindram, in south Travancore, *Ind. Ant.*, Vol. ii, p. 361 ; c. 2, v. 2, p. 362 ; c. 1, para. 2.)

(61) ' In the centre, fronting the single doorway, is a shrine or maṇḍapa covering a slab, on which is carved in relief a sitting figure with the right foot on an elephant, the left on a bullock.'—(*Ind. Ant.*, Vol. vii, p. 19, c. 1, last four lines.)

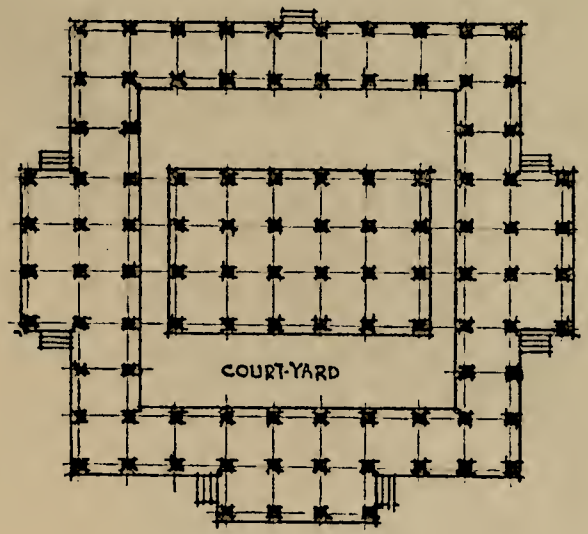
(62) Rambhā-patra-phala-prasūna-lalite sat-toraṇāchchhādane nānā-varṇa-patāka-ketana-lasat-prānte mahā-maṇḍape |

THE PAVILIONS

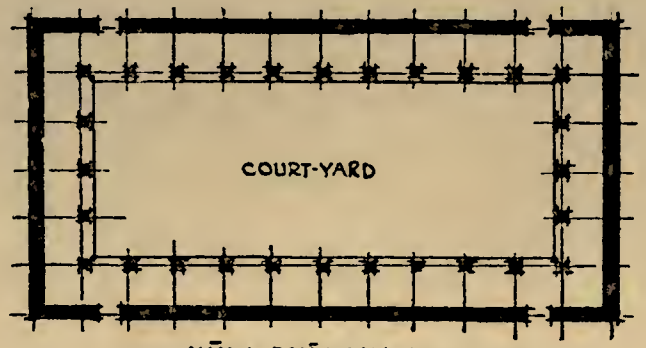
NOTE :–

1. THE RED LINES INDICATE THE NUMBER OF PARTS A PLAN CONTAINS.
2. IN KŪLADHĀRANA PLAN EACH UNIT OF DEVISION REPRESENTS 2 PARTS.

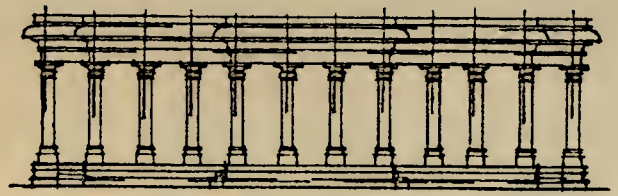
PART SECTION



ASSEMBLY HALL
OF 100 COLUMNS, 9 PARTS SQUARE



KŪLA-DHĀRANA PAVILION
24 BY 12 PARTS TOBE USED AS A COW-SHED



CONJECTURAL ELEVATION OF THE HALL

Kuṇḍānāṁ navakaṁ vidhāyya vidhivad-viprair vidhāna-kshamaiḥ
karmāścharya-karaṁ samāpayad idaṁ Śrī-Raṅganātho guruḥ ॥

(Inscrip. from Nepal, no. 23, inscrip. of Queen Lalitatripura Sundari, v. 3, *Ind. Ant.*, Vol. IX, p. 194.)

(63) 'On the east side of this great Stūbi or Vimāna stands the Veli-maṇḍapam or "outer hall," a plain rectangular building 160 feet long by 83 feet wide, with a flat roof supported by four rows of plain stone pillars . . . '

'Between the Veli-maṇḍapam or outer court and the great Vimāna, there is a three-storeyed building joining them together, called Mele-maṇḍapam, covering the transverse aisle between the north and south entrances by which the shrine is approached. This portico or transept is designed and completed in keeping with the grand scale and style of the Vimāna.'—(Gangai-Koṇḍapuram Śaiva temple, *Ind. Ant.*, Vol. IX, p. 118, c. 1.)

(64) Śrī-Brahma-Devara-maṇṭapavanu—'presented the Brahma Deva maṇṭapa.'—(*Ep. Carnat.*, Vol. II, no. 121; Roman Text, p. 88; Transl., p. 172.)

(65) 'Tupada-Vengaṭapa made a stone maṇṭapa and a well for the god Prasanna-Vengaṭaramaṇa to the north-west of the precincts of the temple of the god Paśchima-Ranganātha.'—(*Ep. Carnat.*, Vol. III, Seringapatam Taluq, no. 9; Transl., p. 8; Roman Text, p. 17.)

(66) 'Also land for the god Hanumanta newly set up in the maṇṭapa in the middle of the village, to which the god Rāma pays a visit at the Rāmanavamī (festival), i.e., the idol of Rāma is brought there on that occasion.'—(*Ibid.*, no. 13; Transl., p. 9; Roman Text, p. 21.)

It should be noticed that this maṇḍapa does not belong, as an attached or detached building, to any temple. It is by itself a temple. Such maṇḍapas or temples are named after the gods whose idols are consecrated in them, such as Vishṇu-maṇḍapa, Kāli-maṇḍapa, and so forth.

(67) 'His awful wife Rangamma, . . . had erected a maṇṭapa, with a large pond, and presented a palanquin set with jewels and all other kinds of gifts, a bank having grown up and being unsightly, he bought the ground and established there a maṭha, also endowing it so that 24 chief Vaidika Vaishṇava Brāhmaṇs of the Rāmānuja sect might be fed in the raṅga-maṇṭapa.'—(*Ep. Carnat.*, Vol. III, Seringapatam Taluq, no. 89; Transl., pp. 26–27; Roman Text, p. 57.)

(68) Śrī-Timma-daṇḍanāyaka mahisī Śrī-Ranga-nāyakī-rachitā ।
Sampat-kumāra-mahisī puratah pratibhāti raṅga-maṇṭapikā ॥

'Timma-daṇḍanayaka's wife (Queen Consort) Ranga-nāyakī erected a ranga-maṇṭapa in front of (the temple of) the goddess of Sampat-kumāra.'—(*Ibid.*, no. 97; Roman Text, p. 59; Transl., p. 28.)

In this sense maṇḍapa is most generally understood. This is what is called nāṭ (i.e., nṛitya or raṅga)-mandira, as stated above.

(69) ' Caused to be erected the raṅga-maṇṭapa of the god Keśava, . . . also the raṅga-maṇṭapa of the god Raṅganātha to the south-east of that village and a sabhā-maṇṭapa for . . . the village.'—(*Ep. Carnat.*, Vol. III, Tirumakūḍlu-Narasipur Taluq, no. 58 ; Transl., p. 78.)

(70) ' The accountant Liṅgana, son of . . . with devotion erected (a maṇṭapa of) 12 aṅkaṇas near the big aśvattha tree, in proximity to the Matsya-tīrtha, on the bank of the Arkapushkariṇī.'—(*Ep. Carnat.*, Vol. IV, Yedatore Taluq, no. 3 ; Transl., p. 52 ; Roman Text, p. 84.)

(71) ' The manager of his (Kṛishṇa-Deva-mahārāya's) palace, . . . made for the god Vīrabhadra . . . , a gandhagoḍi-maṇṭapa, in front of the raṅga-maṇṭapa.'—(*Ep. Carnat.*, Nāgamaṅgala Taluq, no. 4 ; Transl., p. 114 ; Roman Text, p. 188.)

(72) ' Haridāsa-Rāūta, son of . . . set up in front of the god Prasanna-Mādhava of Beḷḷūr a festival (utsava) maṇṭapa, a pillar for lights (dīpa-māleya-kambha) and an altar for offerings (bali-pītha).'—(*Ep. Carnat.*, Vol. IV, Nāgamaṅgala Taluq, no. 42 ; Transl., p. 124 ; Roman Text, p. 213.)

(73) ' Caused a uyyāle-maṇṭapa to be erected for the spring festival of the god.'—(*Ep. Carnat.*, Vol. V, Part I, Belur Taluq, no. 12 ; Transl., p. 46 ; Roman Text, p. 106.)

(74) ' Newly built the Kalyāṇa-maṇḍapa (Kaṭṭisi samarpisida Kalyāṇa-maṇṭapa aṅkaṇa) as an offering at the lotus-feet of the god Chenna-Keśava.'—(*Ep. Carnat.*, Vol. V, Part I, Belur Taluq, no. 21 ; Transl., p. 52 ; Roman Text, p. 119.)

(75) The grant was made ' that a pond and maṇṭapa may be constructed in front of the temple upper storey for the spring water-festival (vasanta-kāladalli abage-seve naḍeve-bagge) for the god.'—(*Ibid.*, no. 29 ; Transl., p. 54; Roman Text, p. 122, line 15 f.)

(76) ' He constructed a pond for a raft and a Vasanta-maṇṭapa ; and in order to provide for ten days' raft festival in Phālguna, for the oblation and feeding of Brāhmaṇs during the festival . . . he made a grant.'—(*Ep. Carnat.*, Vol. V, Part I, Belur Taluq, no. 78 ; Transl., p. 64–65 ; Roman Text, p. 150.)

(77) ' Built a brick enclosure for the temple, erected a kalaśa to it, and a wooden raṅga-maṇṭapa, in front, had the whole plastered,' . . . —(*Ep. Carnat.*, Vol. V, Part I, Arsikere Taluq, no. 8 ; Transl., p. 115, line 6 f. ; Roman Text, p. 263, line 9.)

(78) ' Seated on the diamond throne in the maṇṭapa in front of the Basaveśvara temple in the square in the middle of the street of the sun and moon in the Kaṇṭhīrāya-pete of Bāṇāvāra situated to the south o Śrīśaila.'—(*Ibid.*, no. 94 ; Transl., p. 150, line 2 f.)

(79) ' (On the date specified), all the Brāhmaṇas of the immemorial agrahāra Brāhma-samudra, agreeing among themselves, and going to the prabhu-maṇṭapa (pabu-maṇṭapadalli) and seating themselves, Dāmoja,

son of the carpenter Mādiyoja, having worshipped their feet and presented 5 pa, they granted to him a rent-free estate (specified).'—(*Ep. Carnat.*, Vol. VI, Kaḍūr Taluq, no. 57; Transl., p. 12; Roman Text, p. 38–39).

(80) 'Caused a bhoga-maṇṭapa to be erected in front of the temple of the god Janārddana.'

It should be noticed, that the bhoga-maṇṭapas are generally built on the side, and not in front, of the temple.—(*Ep. Carnat.*, Vol. VI, Kadūr Taluq, no. 91; Transl., p. 16; Roman Text, p. 52.)

(81) 'Caused the Nandi-maṇṭapa to be erected.'—(*Ibid.*, Chikmagalur Taluq, no. 76; Transl., p. 44; Roman Text, p. 111, line 7.)

(82) 'Outside, it (the temple of Sambhava-nātha) is very plain and unpretentious, whilst inside it consists of three apartments—a maṇḍapa or porch, the Sabhā-maṇḍapa, or assembly hall, and the nij(a) mandira or shrine. The floors are laid with coloured marbles and the roof supported on pillars.'

'The maṇḍapa or hall is roofed by an octagonal dome supported, as usual, on twelve pillars.' . . .—(Ahmadabad Architecture, Burgess, *Arch. Surv.*, New Imp. Series, Vol. XXXIII, pp. 87, 90.)

(83) *See* Mukha-maṇḍapa, of Someśvara temple at Kolar.—(*Mysore Arch. Reports*, 1913–14, Plate VII, fig. 3, p. 20.)

(84) 'Its (Kandāriya Mahādeo temple's) general plan is similar to that of most of the larger mediaeval temples of Northern India (*see* its plan, Plate XCVII). It has the usual ardha-maṇḍapa or portico, the maṇḍapa or nave, the mahā-maṇḍapa or transept, the antarāla or ante-chamber, and the garbhagṛiha or sanctum, each of which has its separate pinnacled roof rising in regular gradation from the low pyramid of the entrance to the lofty spire of the sanctum.'—(Cunningham, *Arch. Surv. Reports*, Vol. II, p. 419, no. 3.)

'There are eighteen carved pillars, each of 9′ 9″ high, supporting the dome of the outer hall or the ardha-maṇḍapa, which affords an area of 16′ 3″ inside for loungers and devotees to rest it.'—(*Ibid.*, Vol. XXIII, p. 135.)

(85) 'Maṇḍapa—any open or enclosed building in connexion with a temple. If used for any purpose, the distinctive name is prefixed.'—Rea. (Chalukyan Architecture, *Arch. Surv.*, New Imp. Series, Vol. XXI, p. 39.)

(86) Madhya-maṇḍapa—second hall of a temple.

Mahā-maṇḍapa—central hall of a temple, the nave.

Maṇḍapa—the porch of a temple.—(Vincent Smith, Gloss. to Cunningham's *Arch. Surv. Reports*.)

It should be noticed that the architectural treatises, general literature, and epigraphical records corroborate one another as regards the various types of this class of buildings.

MAṆḌAPIKĀ (*see* MAṆḌAPA)—A small pavilion, a custom house.

(1) Śrī-Naddūla-mahā-sthāne śrī-Saṁḍeraka-gachchhe śrī-Mahā-vīradevāya śrī-Naddūla-talapada-śulka-maṁḍapikāyāṁ māsānumāsaṁ-dhūpa-tailārthaṁ ।

(Granted to the Jaina temple of) 'Mahāvīradeva in the Saṇḍeraka gachchha, at the holy place (Mahāsthāna) of Naddūla, a monthly (sum of five drammas) (to be paid) from the custom house in the grounds (talapada-svatala) of Naddūla.'

'For passages in which the term maṇḍapikā occurs, compare *Ep. Ind.*, Vol. I, p. 114, line 27; p. 173, line 6 (Sīyaḍoṇi-śātka-maṇḍapikā); p. 175, lin3 19; p. 177, lines 29 and 30; p. 179, line 45; p. 262, linc 3 (pattana-maṇḍapikā); *Ind. Ant.*, Vol. XIV, p. 10, col. 2 (Śrī-pathāstha-maṇḍapikā); *Journ. As. Soc. Beng.*, Vols. LV, Part I, p. 47; IV, p. 48, and V., Bhāvnagar inscrip., p. 205, line 7. Śulka-maṇḍapikā occurs, e.g., in Bhavnagar inscrip., p. 158 f., lines 10, 15 and 18. The meaning of maṇḍapikā is suggested by the Marāṭhi māṁḍavī, a custom house.' Prof. Kielhorn.—(The Chahamanas of Naddūla, no. A, Nadol plates of Alhaṇadeva, lines 22–23, *Ep. Ind.*, Vol. IX, pp. 66, 63, and note 8.)

(2) Cf. Maṇḍapikā-dāyāt śreshṭhi-nara-siṁha-go-vṛisha-dhīrādi-tyaiḥ ।

(Shergadh stone inscrip., lines 1–2, *Ind. Ant.*, Vol. XL, p. 176.)

(3) Maṇḍapikā—evidently means some public or official building of the town.—(*Ind. Ant.*, Vol. XIV, p. 10, second col., line 5; and *Journ. Beng. As. Soc.*, Vol. XXX, p. 332, last line; Siyadoni inscrip., lines 6, 19, 29, 30, 45, *Ep. Ind.*, Vol. I, p. 166, 173 f.)

(4) Śrī-Timma-daṇḍanāyaka mahisī Śrī-Raṅga-nāyakī rachitā ।
Sampat-kumāra-mahisī-puratah pratibhāti raṅga-maṇṭapikā ॥

'Timma-daṇḍanāyaka's wife (Queen Consort) Raṅga-nāyaki erected a raṅga-maṇṭapa in front of (the temple of) the goddess of Sampat-kumāra.'—(*Ep. Carnat.*, Vol. III, Seringapatam Taluq, no. 97; Roman Text, p. 59; Transl., p. 28.)

MAṆḌI (*see* BODHIKĀ)—The crowning part of the capital of a column, a market-place, a market.

(*Suprabhedāgama*, XXX, 57, 107; *see* under STAMBHA.)

MATTA-VĀRAṆA—An elephant in rut, a kind of entablature.

(*M.*, XVI, 19, also L, 279; *see* under PRASTARA.)

MADIRĀ-GṚIHA (ŚĀLĀ)—A drinking house, a tavern, an ale-house.

Śiva-vaiśravaṇāśvi-śrīmadirā-gṛihaṁ cha pura-madhye kārayet ।

(*Kauṭilīya-Artha-śāstra*, Chap. XXV, p. 55–56.)

MAṆḌALA (*see* VALABHĪ)—A synonym of valabhī or a sloping roof.

(*M.*, XVI, 51; *see* under (BA)VALABHĪ.)

MADHŪCHCHHISHṬA—Wax, the casting of an image in wax.

Mānasāra (Chap. LXVIII, 1–56, named Madhūchchhishṭa) :

The chapter opens with an enumeration of phalli and ascetics as well as architects whose images are to be cast in wax (lines 2–19). The architects, called sthapati and sthāpaka, make the can for preparing the wax therein, but the actual preparation is not explicitly described. All kinds of images, temporary or permanent, stationary or movable, have to be cast in wax. The process seems to be this (lines 20–44) : some part of the image is covered with a thin copper-leaf, and the wax is laid on two or three aṅgulas deep. Mulikā(?) is spread above the part covered with wax. The idol is heated after it has been besmeared with wax. If the master likes, the process of smearing may be done with melted iron too. The half of the image, not covered with earth, is washed in water. This process is repeated several times. If any of the minor limbs be lost through this process, the image should be furnished with it again after having been heated. But if the head or the middle of the body be damaged, the whole image should be changed. If the master does not like the image, it should be recast.

The whole process has to be performed through many ritualistic ceremonies in different stages.

In other texts the process of casting an image in wax is much more clearly described :

'If images have to be cast in metal, the wax must first be melted and poured (out of the mould) and all defects removed with cloth.'—(*Karaṇāgama*, II, 41.)

'If the images be required to be made of earth, rods (of metal or wood) must be (inserted in them) ; if of metal it must first be prepared well in wax.'—(*Suprabhedāgama*, XXXIV, 21.)

'If an image is to be made of metal, it must be first made of wax, and then coated with earth ; gold and other metals are purified and cast into (the mould) and a complete image is thus obtained by capable workmen.'—(*Vishṇu-saṁhitā*, Paṭala XIV.)

'In regard to bronze images' says Mr. Rao 'it is believed by some that India could not have known the Cire perdue method of making metal images earlier than about the tenth century A.D. and that India must have, therefore, borrowed it from Europe. That the art of casting metals

in wax moulds is much earlier in India can be shewn in more ways than one.' In support of his assertion, Mr. Rao gives the three above-mentioned quotations.—(*Elements of Hindu Iconography.*)

MADHYA-KĀNTA—A class of the twelve-storeyed buildings once prevailing in the central country (*see* details under PRĀSĀDA).

Madhyamālaya-vistāre-trayas-triṁśad-vibhājite ।
Tri-bhāgaṁ kūṭa-vistāraṁ madhya-bhadraika-bhāgikam ।
Mahā-śālā navāṁśaṁ syāt śesharn pūrvavad ācharet ।
Madhya-kāntam iti proktam ।

(*M.*, XXX, 11–14.)

MADHYA-KOSHṬHA—The middle compartment, the central hall.

(*M.*, XXXIII, 305, etc.)

MADHYA-NĀSĪ (*see* NĀSĪ)—The middle vestibule.

(*M.*, XV, 119, 124, etc.)

MADHYA-BHADRA (*see* BHADRA)—The middle tabernacle, the central porch or hall.

(*M.*, XV, 110 ; XIX, 177 ; XXXIII, 380, etc.)

MADHYA-BHUVĀṄGA—A moulding of the door.

(*M.*, XXXIX, 72.)

MADHYA-RAṄGA (*see* MUKHTA-PRAPĀṄGA)—The central theatre, the enclosed courtyard, the quadrangle surrounded by buildings on four sides and open at the top.

Mānasāra (Chap. XLVII, 1–36 named Madhya-raṅga,) refers in this connection to the open quadrangle, stone column and grain-column (mukta-prapāṅga, śilā-stambha and dhānya-stambha). The Madhya-raṅga is provided with dwarf pillars, entablatures, platforms, daises, pedestals, tabernacles, vestibules, pent-roofs, top-rooms, etc. The upper portion is adorned with figures of leographs and crocodiles.

The meaning of the term is clear from the contents of this chapter and also from the quotations given below :

Madhya-raṅgaṁ tad-uddiśya chordhve'laṅkāra(ṁ) vakshyate ।
Evaṁ tu chordhvālaṅkāraṁ madhya-raṅge tu vinyaset ।

(*M.*, XVI, 155, 169 ; *see* also lines 156–168.)

In connexion with maṇḍapas or pavilions.

(*M.*, XXXIV, 128, 210, 234, 324, 456, etc.)

Gṛihe vā madhya-raṅge vā pārśve vā chaiśa-koṇake (aṅkurārpaṇaṁ kuryāt) ।

(*M.*, XXXVII, 13.)

The central part of the coronation hall.—(*M.*, XLIX, 183.)

MADHYA-ŚĀLA (*cf.* ŚĀLĀ)—The middle hall, a special interior chamber, a kind of council hall.

Kshudra-śālāshṭadhā proktaṁ koshṭha-śālā-chatushṭayam ।
Madhya-śālā-tri-bhāgena bhadra-śālā cha madhyame ।
(*M.*, XXVI, 12–13 ; *see* also *M.*, XX, 56, etc.)

MANDARA—A type of building which is 30 cubits wide, has ten storeys and turrets.

(1) Triṁśad-dhastāyāmo daśa-bhaumo mandaraḥ śikhara-yuktaḥ ।

(Compare this with Kāśyapa quoted by the commentary and given below) :

Mandaraḥ śikharair yuktaḥ shaḍ-aśrir daśa-bhūmikaḥ ।
Triṁśad-dhastāṁś cha vistīrṇaḥ prāsādo'yaṁ dvitīyakaḥ ॥
(*Brihat-saṁhitā*, LVI, 21, *J. R. A. S.*, N. S., Vol. VI, p. 319.)

(2) *Bhavishya-Purāṇa* (Chap. CXXX, v. 28; *see* under PRĀSĀDA).

(3) *Matsya-Purāṇa* (Chap. CCLXIX, vv. 28, 32, 47, 53; *see* under PRĀSĀDA).

(4) *Agni-Purāṇa* (Chap. CIV, vv. 14, 15 ; *see* under PRĀSĀDA).

(5) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 21–22, 24-25 ; *see* under PRĀSĀDA).

(6) A building with four śālās (compartments) and eight kūṭas (towers or domes) :

Mand(h)ara-nāma ity-uktaś chatuḥ-śālāshṭa-kūṭakam ॥
(*Suprabhedāgama*, XXXI, 43.)

MANDIRA—A type of building, a hall, a room, a temple, a shrine.

(1) A type of rectangular building (*Garuḍa-Purāṇa*, Chap. XLVII, vv. 21–22, 26–27 : *see* under PRĀSĀDA).

(2) Three kinds of mandira (*Vāstu-vidyā*, ed. Ganapati Śāstri, VII, 15–18) :

(3) Shoḍaśa-mandira-chakra (*Vāstu-tattva*, 1853, p. 1 f., *see* under GṚIHA-VINYĀSA).

(4) Paritaḥ praṇavākāra-prākāra-valayāṁchitam ।
Kamanīya-śālā-stambha-kadambottaṁbitāṁvaram ॥
Visaṁkaṭa-viṭaṁ kālī-virājad-raṁga-maṁṭapam ।
Vidhāya vipulottuṁga-gopuraṁ deva-maṁdiram ॥
Viśālāṁ ratha-vīthīṁ cha syaṁdanaṁ maṁdaropamam ।
Tatra pratishṭhitārya-śrī-Tāraka-brahma-rūpiṇe ॥

'Built a temple (at Krishṇāpura) which was encircled by a wall of the shape of the praṇava and a broad and lofty tower. It has a large raṅga-maṇḍapa raised on a collection of beautiful stone pillars and adorned with rows of spouts. He built a car like the Mandara mountain and also broad

roads round the temple and for the propitiation of the god Vishṇu, set up there (i.e. in the temple).'

(Krishnapuram plates of *Sadāśivarāya*, vv. 55, 56, 57, *Ep. Ind.*, Vol. IX, pp. 336, 341.)

(5) Tenedaṁ kāritaṁ tuṅgaṁ dhūrjjaṭer mandira-gṛiham ।

'He caused to be made this lofty dwelling of Dhūrjjaṭi (Śiva).'—(Inscrip. at the Ganeśa temple, Māmallapuram, v. 10, *H. S. I. I.*, Vol. I, no. 18, pp. 4, 5, *ibid.* no. 18, inscrip. at the Dharmaraja maṇḍapa, Māmallapuram, v. 10, p. 6.)

(6) 'Kośa-varddhana-girer anupūrvvaṁ so'yam unmishita-dhīḥ sugatasya ।
Vyastam āraṇi-karaika-garimṇyo mandiraṁ sma vidadhāti yathārtham ॥

'To the east of mount Kośa-vardhana, this man of open intellect established in a manner suitable to the purpose a temple of that Sugata (Buddha), the dignity of whom alone sufficed to defeat hosts of Māras.'—(Buddhist Sanskrit inscript., from Kota, v. 17; *Ind. Ant.*, Vol. XIV, pp. 46, 48.)

(7) . . . Tenedaṁ maṁdiraṁ Kāma-vidvishaḥ ।
Kāritam muktaye bhaktyā kīrttayecha kṛitātmanaṁ ॥

(Inscrip. of the Kings of Chedi, no. A, Tewar stone inscrip. of Gayā Karṇadeva, line 17, *Ind. Ant.*, Vol. XVIII, p. 211.)

(8) Jainaṁ mandiram indirā-kula-gṛihaṁ sad-bhaktito' chīkarat ।

'Out of pure faith, he made this Jaina temple a home for Lakshmī.'—(*Ep. Carnat.*, Vol. II, no. 65; Roman Text, p. 60; Transl., p. 149.)

MASI(-SĪ)TI—A mosque, a Muhammadan place of worship.

'Raṅgai-Nāyakayya, in order to endow the stone masīti (mosque) (kalla-masītiya-deva-sthānakke), which Bābu Seṭṭi had erected in the inner street of Sindaghaṭṭa, made a grant for it of the village of Śivapura and Habiba's house.'—(*Ep. Carnat.*, Vol. IV, Krishṇarājapeṭ Taluq, no. 72; Transl., p. 111, Roman Text, p. 183.)

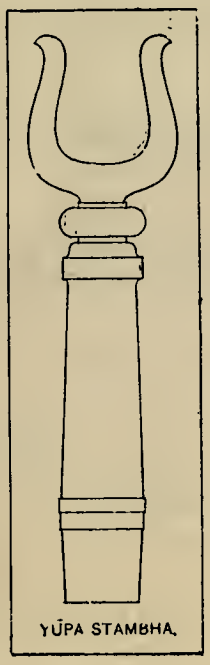
MASŪRAKA—A lintel, i.e., thin piece of timber or stone that covers an opening and supports a weight above it. It implies the cornice of the entablature. It is sometimes used in the sense of adhishṭhāna or base.

(1) Adhishṭhāna-vidhiṁ vakshye śāstre saṁkshipyate'dhunā ।
Harmya-tuṅga-vaśāt proktaṁ tasya māsūrakonnatam ।

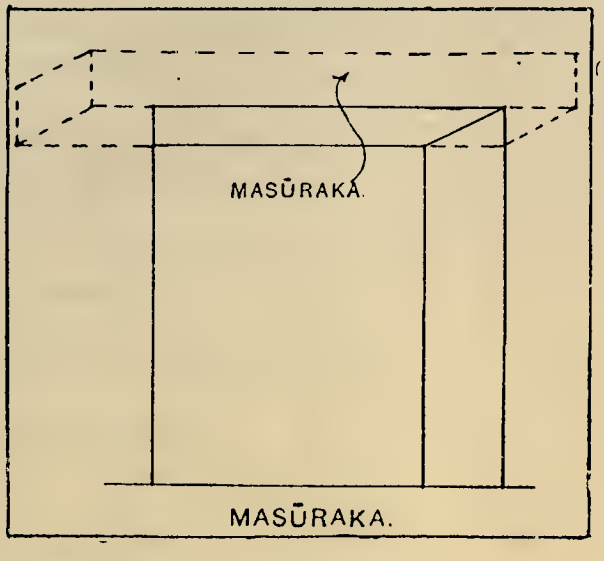
(*M.*, XIV, 1, 8.)

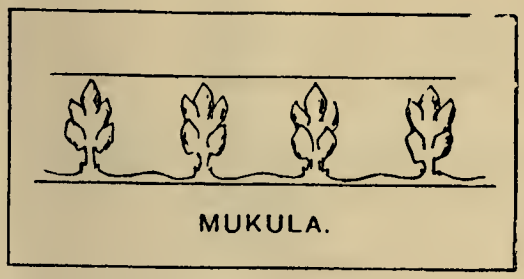
Tasmān masūreṇa sahaiva sarvaṁ kṛitaṁ vimāneshu cha bhūshaṇāni ।

(*Ibid.*, 409–410.)

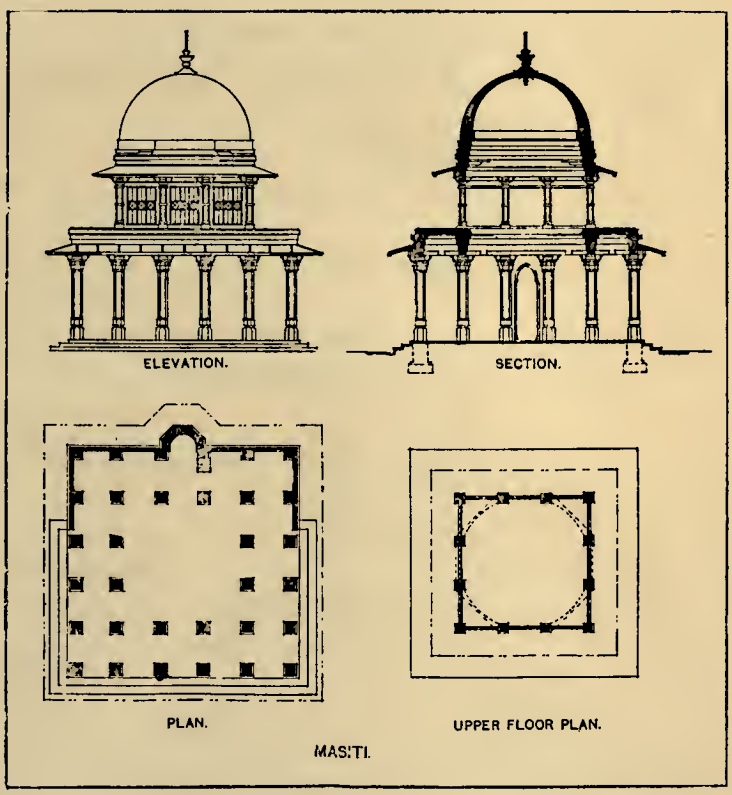


YŪPA STAMBHA.





MUKULA.



MASTI.

Evaṁ chatuḥ-shashṭi-masūrakāṇi śāstrokta-mānena vibhājitāni ।
(*Ibid.*, 393–394.)

Āhatya(m) ashṭadhā harmyaṁ gaṇya-mānam ihochyate ।
Utsedhe chāshṭa-bhāge tu ekāṁśena masūrakam ।
Dvi-bhāgaṁ chāṅghri-tuṅgam. . . . ।
(*M.*, XIX, 20–22 ; *see* also XLVII, 5 ; XXXIV, 266, etc.)

(2) Tad-varddhitopapīṭhaṁ vā tad-varddhita-masūrakām ।
Pādāyāma-samottūṅga-masūraka-yutāṁ tu vā ।
(*Kāmikāgama*, XXXV, 115.)

Masūra implies the cornice of the entablature.
(*Ibid.*, LIV, 47 ; *see* under PRASTARA.)

Masūra, a synonym, as stated, but apparently a component part, of adhishṭhāna or base :

Masūrakam adhishṭhānaṁ vastvādhāraṁ dharātalam ।
Talaṁ kuṭṭimādy-aṅgam adhishṭhānasya kīrtitam ॥
(*Ibid.*, LV, 202.)

MAHĀ-KĀNTA—A class of eight-storeyed buildings.
(*M.*, XXVI, 35–39 ; *see* under PRĀSĀDA.)

MAHĀ-GOPURA—The gate-house of the fifth court or at the extreme boundary of a compound.
(*M.*, XXXIII, 10 ; *see* under GOPURA and PRĀKĀRA.)

MAHĀ-GRĀMA—A large village.
(*M.*, X, 79 ; *see* details under GRĀMA.)

MAHĀ-TAULI—A synonym of prachchhādana or roof, the top-floor.
(*M.*, XVI, 57.)

MAHĀ-DVĀRA—The great door, the chief or outer gate of a village, town or house.
(*M.*, IX, 290, 315 ; *see* under DVĀRA.)

Mahā-dvaraṁ tu sarveshāṁ lāṅgalākāra-sannibham ।
Kapāṭa-dvaya-saṁyuktaṁ dvārāṇāṁ tat pṛithak pṛithak ।
(*M.*, IX, 360–361 ; *see also* XXXI, 79.)

MAHĀ-NĀSĪ (*see* NĀSĪ)—A large vestibule.

(Nāsikā-śikharānvitam) tad-ardhaṁ stūpikottuṅge tan-māhā nāsikā-śraye ।
(*M.*, XV, 91.)

Dvi-lalāṭe mahā-nāsī ekādaśa-śikhānvitam ।
(*M.*, XXXIII, 202, etc.)

MAHĀ-PADMA—A type of round building.

(1) *Agni-Purāṇa* (Chap. CIV, vv. 17–18; *see* under PRĀSĀDA).

(2) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 21, 23, 28–29; *see* under PRĀSĀDA).

MAHĀ-PAṬṬA—A moulding of the base, a large fillet.

(*M.*, XIV, 301; *see* the lists of mouldings under ADHISHṬĀNA.)

MAHĀ-PĪṬHA—The pedestal, a site plan, the lower part of the phallus:

A site plan in which the whole area is divided into sixteen equal squares.—(*M.*, VII, 5, 61; *see* under PADA-VINYĀSA.)

Cf. Mahā-pīṭha-pade rathyā dikshu dikshu trayaṁ tathā ।

(*M.*, IX, 429, etc.)

The pedestal of an image:

Padma-pīṭhaṁ mahā-pīṭhaṁ tri-mūrtīnāṁ cha yojayet ।

(*M.*, LI, 86, etc.)

MAHĀ-MAṆḌAPA (*see* under MAṆḌAPA)—The great hall of entrance to the main shrine of temples.

(Chālukyān Architecture, *Arch. Surv.*, New Imp. Series, Vol. XXI, p. 39.)

See under MAṆḌAPA:

Mangalagiri pillar inscrip. (vv. 44, 47, 51, *Ep. Ind.*, Vol. VI, pp. 114, 115, 123, 124, 125).

Two Jain inscrip. of Irugappa. (no. B, line 2, *ibid.*, Vol. VII, p. 116).

Inscrip. from Nepal (no. 23, inscrip. of Queen Lalita-Tripura Sundari, v. 3, *Ind. Ant.* Vol. IX, p. 94).

'This building (mahā-maṇḍapa) stands in the east central portion of the large court. . . . it originally stood detached from the central vimāṇa.'

'The plan is a rectangle with the greater length from north to south. The four sides are open in the centre, and on each façade, a portion of the wall is returned along the several elevations from the four corners. The east front has the entrance divided into three bays by two square piers, with a responding pilaster on the return wall at each side.'

'The west side or back is similarly divided, but the piers are octagonal for a portion of their length.'

'The north and south entrances are simple openings, with pilasters on the sides, undivided by piers.'

'Two yālis on the back responding pilasters are abutted against and partly covered by the east wall of the modern ardha-maṇḍapam. The forated window in the east wall of the ardha-maṇḍapam opens in to the mahā-maṇḍapam.'—(Pallava Architecture, *Arch. Surv.*, New. Imp. Series, Vol. XXXIV, p. 36, paras. 1, 2, 3, 4, 8 and 10; *see* also Plate L.)

'The mahā-maṇḍapa was roofed also by overlapping courses of stones: the square corners were gradually rounded off by successive small portions, till it formed an octagon, over which the circular roof proper rested.' —(Cunningham, *Arch. Surv. Reports*, Vol. VIII, p. 171, para. 2.)

MAHĀ-MARYĀDĀ—The fifth enclosure (prākāra) at the extreme boundary of a compound, the gate-house thereof is called mahā-gopura or dvāra-gopura.

(*Suprabhedāgama*, XXXI, 118, 125; *see* under PRĀKĀRA.)

MAHĀ-VĀJANA—A large fillet, a moulding of the entablature.

(*M.*, XVI, 69; *see* the lists of mouldings under PRASTARA.)

MAHĀ-VṚITA—A kind of phallus.

(*M.*, LII, 2; *see* under LIṄGA.)

MAHĀ-VṚITTA—A kind of joinery.

(*M.*, XVII, 102; *see* under SANDHI-KARMAN.)

MAHĀ-ŚĀLĀ—A large hall.

Cf. of the sixteen parts width of a building the mahā-śālā is seven parts broad.—(*M.*, XXVI, 10, etc.).

MAHĀSANA—A site plan in which the whole area is divided into 225 equal squares.

(*M.*, VII, 18–20; *see* under PADA-VINYĀSA.)

MAHĀṂBUJA—A large cyma, a moulding of the pedestal.

(*M.*, XIII, 91; *see* the lists of mouldings under UPAPĪṬHA.)

MĀGADHA(-KĀNTA)—A class of twelve-storeyed buildings once prevailing in the country of Magadha.

Tad evam anu-śālā madhye bhadra-śālaika-bhāgikam |
Evaṁ māgadha-kāntaṁ syāt karṇa-kūṭa-sabhadrakam |

(*M.*, XXX, 33–34; *see* also 31–32 under VAṀŚA-KĀNTA.)

MĀṆI-BHADRA (*see* MAṆI-BHADRA)—A pavilion with sixty-four columns.

(*Suprabhedāgama*, XXXI, 103; *see* under MAṆḌAPA.)

MĀTRĀṄGULA (*see* under AṄGULA)—A measure equal to the middle digit of the middle finger in the right hand of the architect or priest, employed in measuring the sacrificial objects like the kuśa-grass or seat, the spout of a ladle, and the ladle, etc.

(*Suprabhedāgama*, XXX, 4–5, 7–8 ; *see* under AṄGULA.)

MĀNA—A house well measured (*A.-V.*, IX, 3 ; III, 12). The measurement of height or length.

(1) The linear measurement is divided into six kinds—Māna (Āyāma, Āyata, Dīrgha), Pramāṇa, Parimāṇa (Vistāra, Tāra, Stṛiti Vistṛiti, Vistṛita, Vyāsa, Visārita, Vipula, Taṭa, Vishkambha, Viśāla), Lamba-māna (Sūtra, Unmita), Unmāna (Bahala, Ghana, Miti, Uchchhrāya, Tuṅga, Unnata, Udaya, Utsedha, Uchcha, Nishkrama, Nishkriti, Nirgama, Nirgati, Udgama), and Upamāna (Nivra, Vivara, Antara).

The measurement from the foot to the top of the head is called Māna which is in fact nothing but height. Pramāṇa is the measurement of breadth (vistṛita). Parimāṇa is the measurement of width or circumference (paritaḥ). Lamba-māna is the measurement along the plumb lines or the lines drawn perpendicularly through different parts of the body, Māna, or the measurement of height being determined by the surface of the body. Unmāna is the measurement of thickness (nimna) or diameter. And Upamāna is the measurement of interspace (antara), such as the distance between the two feet of an image ; this measurement is apparently taken from one plumb line to another :

Mānaṁ chāpi pramāṇaṁ cha parimāṇaṁ lamba-mānakam ।
Unmānam upamānaṁ cha mānaṁ padmaṁ samīritam ।
Pādāṅgushṭhi-sasīmāntaṁ śiro'ntaṁ mānaṁ chāpi prakathyate ।
Pramāṇaṁ vistṛitaṁ proktaṁ paritaḥ parimāṇakam ।
Tat-sūtrāl lamba-mānaṁ syān nimnam unmānam uchyate ।
Avāntaropamānaṁ syād bimbodayādi-sarvaśaḥ ।
Mānam evaṁ tu shaḍ-bhedaṁ mānenāṅgāni mānayet ।

(*M.*, LV, 3-9.)

The primary measurement (ādi-māna) is but the comparative measurement and is divided into the following nine kinds :

The height of an image is determined by comparing it with (i) the breadth (tāra) of the main temple (harmya), (ii) the height of the sanctuary or central hall (garbha-gṛiha), (iii) the length of the door (dvāra-māna), (iv) the measurement of the basement (adhishṭhāna), (v) cubit, (vi) tāla (a span), (vii) aṅgula (finger's breadth), (viii) the height of

the worshipper, and (ix) the height of the riding animal (vāhana) of the principal idol :

Ādimāna-vidhiṁ samyak(-g) lakshaṇaṁ cha ihochyate ।
Harmya-tāra-vaśān mānaṁ garbha-geha-vaśodayam ।
Dvāra-māna-vaśāt tuṅgam adhishṭhāna-vaśodayam ।
Hasta-māna-vaśān mānaṁ tāla-māna-vaśodayam ।
Aṅgulenāpi chottuṅgaṁ yajamāna-vośodayam ।
Mūla-bera-vaśān mānam uttamādi trayaṁ trayam ।

(*M.*, LV, 10–15.)

Each of these nine measures is again divided into nine kinds :

Tasmād ekaṁ tu pratyekaṁ nava-mānam ihochyate ।

(*Ibid.*, 22.)

Under (i), (ii), (iii), (iv), the proportions naturally vary on various occasions ; no specific rules are, therefore, prescribed.

The details of (v) cubit or hasta and (vii) aṅgula will be found under the term ' Aṅgula ' and the details of (vi) tāla are given under ' TĀLA-MĀNA.'

Of the division under (viii) the details of the height of an image as compared with the height of the worshipper are given here. The height of the image may be equal to the full height of the worshipper, may extend up to his hair-limit (on the forehead), or, as sometimes stated, to the eye-line, nose-tip, chin, arm-limit (to the shoulder), breast, heart, navel, and sex organ :

Kanyasād uttamāntaṁ syād yajamānodayaṁ param ।
Keśāntaṁ nāsikāgrāntaṁ hanvantaṁ bāhu-sīmakam ।
Stanāntaṁ hṛidayāntaṁ cha nāvyantam meḍhra-sīmakam ।
Navadhā kanyasāntaṁ syāt sthāvaraṁ jaṅgamodayam ।

(*Idid.*, 30–33.)

And of the division under (ix) the height of the riding animal (vāhana) as compared with the height of the principal idol (mūla-bera) admits of similar nine kinds as under (viii) (*see* details under UTSAVA and KAUTUKA).

Hasta (v) and aṅgula (vii) are the real units, employed equally in measuring both architectural and sculptural objects.

The rest are exclusively sculptural and comparative measures. The similar measures have also been prescribed for architectural objects. The architectural ' Gaṇya-māna ' or the comparative heights of the component members of a structure corresponds to the sculptural ' Tāla-māna ' or the comparative heights of the component limbs of a statue (*see* details under GAṆYA-MĀNA and TĀLA-MĀNA).

Five proportions of the height, as compared with the breadth of an architectural object, are given under five technical terms, namely, Śāntika,

Paushṭika, Jayada, Sarva-kāmika or Dhanada, and Adbhuta (*see* details under UTSEDHA).

The 'Ghana-māna' or the measurement by the exterior and the 'Aghana-māna' or the measurement by the interior are exclusively architectural (*see* details under these terms).

Like the sculptural terms Māna, Pramāṇa, Parimāṇa, Lamba-māna, Unmāna and Upamāna, there are architectural terms also to express length, breadth and width, e.g. dīrgha (for dairghya), tāra, vistāra, viśāla, vistṛiti, vistṛita, vishkambha, etc. Māna as stated above is the technical name for sculptural height; but to express the same idea the general terms for height, such as unnati, unnata, utsedha, etc., are also used. Māna is also used in its general sense of measurement, area, etc. Pramāṇa and Parimāṇa are also used in their general senses of length, breadth, width, etc. (Further details will be found under these terms.)

(2) Ataḥ-paraṁ pravakshyāmi mānonmānaṁ viśeshataḥ।

'After this I shall speak about the Māna and Unmāna measurements in particular.'

This is followed by an account of various measures. (Note the different tāla measurements employed in statues.)

(*Matsya-Purāṇa*, Chap. CCLVIII, v. 16.)

(3) Mānaṁ tad-vistāraṁ proktam unmānaṁ nāham eva cha।

(*Suprabhedāgama*, XXXIV, 35.)

(4) Parimāṇonmāna-mānaṁ dhāryaṁ rāja-vimudritam।
Guṇa-sādhana-saṁdakshā bhavaṁtu nikhilā janāḥ॥

Prof. Benoy Kumar Sarkar's translation of 'Parimāṇa' by 'standard of measurement for lands,' 'Unmāna' by 'unit of measurement for liquids,' and 'Māna' by 'unit of measurement for grains' is untenable.

(*Śukranītisāra*, ed. Oppert, I, 310.)

MĀNA-BHADRA—A pavilion with twenty-six pillars.

(*Matsya-Purāṇa*, Chap. CCLXX, v. 12; *see* under MAṆḌAPA.)

MĀNA-MANDIRA (*see* MANDIRA)—The observatory.

Cf. The observatories at Benares, Delhi, Ujjain, Mathura, and Jaipur.

(*See Ind. Ant.*, Vol. XXXV, p. 234.)

MĀNAVA—Relating to Manu or human being, a pavilion with twenty-eight pillars.

(*Matsya-Purāṇa*, Chap. CCLXX, v. 12; *see* under MAṆḌAPA.)

MĀNĀṄGULA (*see* under AṄGULA)—The standard measure (equal to $\frac{3}{4}$ inch), the unit of length.

The smallest measure is the atom or paramāṇu, i.e., the particle of dust visible in the sunshine through a lattice—(*Bṛihat-saṁhitā*, LVIII, 1).

8 atoms = 1 car-dust.
8 car-dusts = 1 hair's end.
8 hair's ends = 1 nit.
8 nits = 1 louse.
8 lice = 1 barley corn.
8 barley corns = 1 mānāṅgula.

This standard aṅgula measure is stated to be used in measuring the architectural objects like the villages, lands, and buildings, etc.

(*Suprabhedāgama*, XXX, 2–3, 6–7 ; *see* under AṄGULA.)

MĀNUSHA—Relating to the human being, a kind of phallus.

(*Kāmikāgama*, L, 35, 38 ; *see* under LIṄGA.)

MĀRGA—A road, a street, a way, a path, a lane, a passage, a canal, a course.

Chaṇḍālānāṁ praveśāya nirgamāya malasya cha ।
Jalasya nirgamārthaṁ tu kshudra-mārgāḥ praśaṁsitāḥ ॥

(*Kāmikāgama*, XXXVIII, 8.)

MĀLIKA(-KĀ)—A class of buildings, a type of pavilion.

(1) Kuḍyasyānta-pradeśe tu yuktyā chāvṛita-mālikam ।
Mālikopari vapra(ṁ) syād adhishṭhānaṁ samodayam ।

(*M.*, XXXI, 60, 64.)

A type of pavilion (maṇḍapa) :

Evaṁ tu mālikākāraṁ śeshaṁ prāg-uktavan nayet ।

(*M.*, XXXIV, 315 ; *see* for description 297–314.)

Maṇḍape chordhva-kūṭaṁ syān mālikākṛiti(ṁ) vinyaset ।

(*M.*, XXXIV, 291.)

(2) Kechid vai mālikākārā kechid vai gopurākṛitiḥ ॥

(*Suprabhedāgama*, XXX, 123 : *see* for full context 115–122, under PRĀKĀRA.)

Tad-bāhye'bhyantare vāpi mālikā-maṇḍapaṁ hi vā ॥

(*Ibid.*, XXXI, 128.)

(3) Tā (śālā) eva mālikāḥ proktā mālāvat kriyate yataḥ ॥
Pañcha-daśa-karāntaṁ tu kuryād āvṛita-maṇḍapam ॥
Maṇḍapena vinā vāpi tena mānena pīṭhikā ।
Vibhadrā vā sabhadrā vā karatavyā mālikā budhaiḥ ॥

(*Kāmikāgama*, XXXV, 6, 99, 100.)

Kāmikāgama (Chap. XLI, named Mālikā-lakshaṇa) :

Classification :

Chaturdhā mālikā śālā sabhā-muṇḍaja-saudhaje ॥ (1)

Definitions (vv. 2–5) :

Śālāyām api śālāṅgā nishkrāntānana-śobhitā ।
Sā śālā mālikā jñeyā śāstre' smin Kāmikāgame ॥
Sabhāvad vihitā bāhye prāsādavad alaṅkṛitā ।
Uha-pratyūha-saṁyuktā yā sabhā sā cha mālikā ॥
Yatheshṭa-diśi saṁyuktā bhoga-bhūmi-samanvitā ।
Prāsāda-vyāsa-dīrghochchā proktā prāsāda-mālikā ॥
Maṇḍapasyokta-vistārāyāma-tuṅga-vibhūshinī ।
Sarvatra muṇḍākāratvāt kathitā muṇḍa-mālikā ॥

Further classifications (vv. 6–7) :

(i) Saṁchita, Asaṁchita, and Upa(also Apa)saṁchita.
(ii) Nāgara, Drāviḍa, and Vesara.
(iii) Jāti, Chhanda, and Vikalpa.
(iv) Śuddha, Miśra, and Saṁkīrṇa.
(v) Vīja, Mūla, and Aṅkura (this class is not specified).

(Excepting the last one, all the other classes occur in the *Mānasāra* also ; *see* under Vimāna-lakshaṇa.)

The details of these classes are given (vv. 8–22).

Still further classifications are given under the following names :

Sindhuka (vv. 23–28), Saṁpūrṇa (vv. 29–30), Meru-kūṭa (v. 31), Kshema (vv. 32–34), Śiva (vv. 35–38), Harmya (vv. 39–40), Saumya (v. 40), Viśāla (v. 41), Sarva-kalyāṇa (vv. 42-49), Vijaya (v. 50), Bhadra (v. 51), Raṅgamukha (v. 52), Alpa (vv. 53–54), Koṇa (vv. 55–58), Geya (vv. 58–59), Sāra (v. 60), Pushkara (vv. 61–63), Adbhuta (v. 61*a*), Saṁkīrṇa (v. 62), and Daṇḍa (v. 64).

Aneka-bhūmi-yuktā tu mālākārā tu mālikā ॥

(*Ibid.*, L, 89.)

Mālikā-yukta-śā(? sā)laṁ chet koṇa-stambhe dvitīyake ।
Prathamāvaraṇe vāpi dvitīyāvaraṇe nyaset ॥

(*Ibid.*, XXXI, 96.)

(4) Śailaṁ śu(m)bhita-śāta-kumbha-vilasat-kumbhaṁ mahā-maṇḍapaṁ prākāraṁ paramālikā-vilasita(ṁ) muktā-mayīṁ cha prapā (-bhā)m.

' Made for the god Vāmana a great maṇḍapa of stone, resplendent with pitchers (domes) of shining gold, surrounding wall, adorned with excellent buildings, and a canopy of pearls.'—(Fourteen incrip. at Tirukkovalur, no. K, of Rajendradeva, lines 1–2, *Ep. Ind.*, Vol. VII, pp. 145, 146.)

MĀLIKĀ-MAṆḌAPA—A pavilion of the Mālikā class of buildings.

(*Suprabhedāgama*, XXXI, 128 ; *see* under MĀLIKĀ.)

MĀLYAJA—A class of buildings, a type of pavilion.

(*M.*, XXXIV, 153 ; *see* under MAṆḌAPA.)

MĀLYĀHUTA—A class of buildings, a type of pavilion.

(*M.*, XXXIV, 316 ; *see* under MAṆḌAPA.)

MIŚRA—A building made of any two materials out of wood, brick, stone, iron, etc.

Eka-dravyaṁ tu śuddaṁ syād dvi-dravyaṁ miśra-harmyakam ।

(*M.*, XVIII, 138, etc.)

Dravya-dvaya-yutaṁ miśraṁ saṁkīrṇaṁ bahubhir yutam ।

(*Kāmikāgama*, XLV, 22.)

MIŚRITA—A kind of ornament prescribed for idols and kings.

(*M.*, L, 1–3 ; *see* under BHŪSHAṆA.)

MUKULA—A bud-like crowning ornament of a pillar.

(*M.*, XV, 32 ; *see* lists of mouldings under ADHISHṬHĀNA, UPAPĪṬHA and PRASTARA.)

MUKULI—A type of round building.

(*Garuḍa-Purāṇa*, Chap. XLII, vv. 21, 23, 28 29 ; *see* under PRĀSĀDA.)

MUKTA-PRAPĀṄGA (*see* MADHYA-RAṄGA)—The open courtyard connected with a tank ('mukta' meaning open, and 'prapāṅga' the body part or bank of a tank). It is built inside the court.

(*M.*, XLVII, 2 f.)

It is stated to be made of wood, stone, brick, etc., and also of jewels and iron especially :

Mukta-prapāṅgam api dāru-śileshṭakādyaiḥ ।
Ratnair aneka-bahu-loha-viśeshakaiḥ ।

(*M.*, XLVII, 31–32 ; *see* also XLVIII, 68.)

MUKHA—The face, frontispiece, the front side of a building, the façade.

Svakīyāṅguli-mānena mukhaṁ syād dvā-daśāṅgulam ।
Mukha-mānena karttavyā sarvāyava-kalpanā ॥

'The face (of one's statue in length) should be 12 aṅgulas (=9 inches), being measured with one's own finger. The whole body should be made symmetrical to the face.'—(*Matsya-Purāṇa*, Chap. CCLVIII, v. 19.)

The front side of a building (*see Kāmikāgama* and *Bṛihat-saṁhitā*, under DVĀRA).

MUKHA-BHADRA (*see* BHADRA)—A portico, a porch, the front tabernacle, the middle niche, the front room corresponding to modern drawing-room or reception hall, staircase room.

Sarveshāṁ mukha-bhadraṁ syāl lakshaṇaṁ vakshyate'dhunā ।

(*M.*, XVIII, 275 ; *see* also 276 f.)

Sarveshāṁ mukha-bhadrāṇāṁ pārśve sopāna-saṁyutam ।

(*M.*, XXX, 93.)

Parito'linda-bhāgena vāraṇaṁ (=door) mukha-bhadrakam ।

(*M.*, XXXIV, 251.)

'The temple (at Amarnāth) itself faces the west but the maṇḍapa or antarāla—the hall of the shrine—has also doors to the north and south. Each of the three doors has a porch (mukha-bhadra), approached by four or five steps, and supported by four nearly square pillars, two of them attached to the wall.'—(The temple of Amarnath, *Ind. Ant.*, Vol. III, p. 317, c. I, last para.)

Deva-Śrī-śaśi-bhūshaṇasya kṛitinā devālayaṁ kāritaṁ yugmaṁ maṁḍapa-śobbitaṁ cha purato-bhadraṁ pratolyā saha ।

Kshetreśasya tathā surālaya-varaṁ sphītaṁ taḍāgaṁ tathā bandhaṁ Kauḍika-saṁjñakaṁ bahu-jalaṁ dīrghaṁ tathā khānitam ।

(Kanker inscrip. of Bhanudeva, v. 7, *Ep. Ind.*, Vol. IX, p. 127.)

MUKHA-MAṆḌAPA—The pavilion in front of a temple.

(*M.*, XIX, 198–199, etc.; *see* under MAṆḌAPA.)

Garbha-sūtra-sama-bhāgād agrato mukha-maṇḍapam ॥

(*Matsya-Purāṇa*, Chap. CCLXIX, v. 6 ; *see* also v. 11 ; also *Garuḍa-Purāṇa*, Chap. XLVII, v. 10.)

Prāsāda-garbha-mānaṁ vā kurvvīta-mukha-maṇḍapam ॥

Śikharasya chaturthena agrato mukha-maṇḍapam ॥

(*Agni-Purāṇa*, Chap. XLII, vv. 7, 12.)

'Made the mukha-maṇḍapa (muga-maṇḍaman) and consecrated (the shrine).'—(Two Anaimalai inscrip. no. II, *Ep. Ind.*, Vol. VIII, pp. 320–321).

MUKHA-VĀRAṆA—The entrance door.

(*M.*, XXXV, 395 ; *see* DVĀRA.)

MUKHYA-HARMYA—The main building, the chief temple.

(*M.*, XIII, 14.)

MUṆḌA-MĀLIKĀ—A class of buildings, the top room.

(*Kāmikāgama*, XLI, 5 ; *see* under MĀLIKĀ.)

MUṆḌA-HARMYA—The top room.

(*See Kauṭilīya-Artha-śāstra* under CHŪLIHARMYA.)

MUṆḌAKA-DVĀRA—A kind of upper door.

(*See Kauṭilīya-Artha-śāstra* under DVĀRA.)

MUDRIKĀ—A small seal, a stamped coin, an impression, a moulding of the column.

(*Suprabhedāgama*, XXXI, 108, 105–177, 109 ; *see* under STAMBHA.)

MUDDHA-VEDI—The so-called Buddhist *tee*, railings in relief are frequently added to it, balustrade, railing.

(*Mahāvaṁśa*, 35, 2, ed. W. Geiger, p. 297.)

MUNI—An ascetic. An account of the images of the seven patriarchs is given in detail in the *Mānasāra*. Agastya is measured according to the seven tāla, Kāśyapa and Bhṛigu according to the eight tāla, and Vāshishṭha, Bhārgava, Viśvāmitra and Bhāradvāja according to the nine tāla. (Details of these measures will be found under TĀLA-MĀNA.)

(*M.*, LVII, 2–6.)

The characteristic features of the patriarchs are also described.

(*Ibid.*, 7–17.)

MUSHṬI-BANDHA—A moulding of the entablature and of the column, a kind of roof, the topmost part of a building, a part of the rampart and of the arch.

The third moulding from the top (downwards) of the entablature (*Kāmikāgama*, LIV, 1, *see* under PRASTARA).

A member of the column (*M.*, XV, 185, *see* under STAMBHA).

A kind of roof (*M.*, XVI, 51 ; *see* under VALABHĪ).

A (crowning) part of a building (*M.*, XVIII, 202).

A part of the rampart :

Vajrākṛitiś cha vaprāṅgaṁ chhatrākāram athāpi vā ।
Uttaraṁ vājanaṁ chaiva mushṭi-bandhaṁ tridhānvitam ।

(*M.*, XXXI, 66–67.)

A part of an arch (*M.*, XLVI, 65 ; *see* under TORAṆA.)

MŪRTI—An image, a statue, an idol.

(1) An image, a statue (*M.*, LI, 26, etc.).

(2) Aṁgulaiś cha tathā mūrtiś chatur-aśīti-saṁmitaiḥ ।

(*Bhavishya-Purāṇa*, Chap. CXXXII, v. 7.)

(3) Deśānurūpa-bhūshaṇa-veshālaṅkāra-mūrtibhiḥ kāryā ।

(*Bṛihat-saṁhitā*, LVIII, 29.)

(4) Śilākhareṇa janitā satya-sandhyasya bhautikī ।
Mūrtiḥ kīrtimayī chāsya kṛitā tenaiva śāśvatī ॥

'By the stone-chisel a material body of Satyasandha was executed, and by the same an eternal body of his fame was produced.'

'The two inscriptions (nos. 33, 34, *H. S. I. I.*, Vol. I.) record that a king Guṇabhara . . . constructed a temple of Śiva on the top of the mountain and placed in it a liṅga and a statue of himself.'—(Trisirapalli Cave inscrip., no. 33, v. 4, *H. S. I. I.*, Vol. I, pp. 29, 30.)

(5) Uttara-bhāgada Kaisāleyalli pañcha-viṁśati-līlā-mūrtigaḷaṁ pratishṭheyam ।

'Set up on the colonnade to the north twenty-five pleasing (līla—a particular attitude, like dhyāna-mūrti) statues.'—[*Ep. Carnat.*, Vol. IV, Chamarajnagar Taluq, no. 86 ; Roman Text, p. 18, lines 15, 10 (bera), 13 (vigraba) ; Transl., p. 11.]

In this inscription, the expressions *bera*, *vigraha*, and *mūrti* occur ; they are to be distinguished : *bera* or *bimba* is an idol of a god, *vigraha* (or image) expresses almost the same idea, *mūrti* implies the statue of both gods and men, and so also does *pratimā*.

MŪRTI-KĀNTA—A type of storeyed building.

A class of five-storeyed buildings (*M.*, XXIII, 19–24 ; *see* under PRĀSĀDA.)

MŪLA-DAṆḌA—The regulating column of a building, the foundation pillar.

The main column (*M.*, XV, 236; *see* also L, 104, etc., under STAMBHA).

MŪLA-BERA—The chief deity in a shrine, the principal idol of a temple.

(*M.*, LV, 34 ; LXI, 21 ; LIV, 3, etc.)

MŪLA-STAMBHA—The foundation pillar, the regulating column of a building.

(*M.*, XV, 234, etc. ; *see* under STAMBHA.)

MŪLA-STHĀNA—The foundation, the base, a temple in the centre of a village or town.

'One perpetual lamp was given to Mahādeva, the lord of the Śrī-Mūla-sthāna at Tirukkaḷukkuṇram.'—(Inscrip. at Tirukkaḷukkunram, line 34, *H. S. I. I.*, Vol. III, p. 148.)

MŪLA-HARMYA—The chief of the buildings forming a group, the principal shrine, the main temple.

(*M.*, XIII, 19; XXXIX, 135, etc.)

MṚIGA-VANA—Deer-forest, a place of sport or recreation of kings.

Tāvan-mātram eka-dvāraṁ khāta-guptaṁ svādu-phala-gulmaguchchaṁ akaṇṭaki-drumam uttāna-toyāśayaṁ dānta-mṛigachatush-padaṁ bhagna-nakha-daṁshtrā-vyāla-mārgāyuka-hasti-hastinī-kalabha-mṛiga-vanaṁ vihārārthaṁ rājñaḥ kārayet।

Sarva-tithi-mṛigaṁ pratyante chānyan mṛiga-vanaṁ bhūmivaśena vā niveśayet।

(*Kauṭilīya-Arthā-śastra*, Chap. XXIII, p. 49.)

MṚIṆĀLAKA—A lotus stalk or fibre, a moulding of the entablature, base, or pedestal, etc., shaped like the lotus stalk or fibre.

A moulding of the lintel (*M.*, XIX, 145, etc.).

The fourth moulding from the top (downwards) of an entablature.

(*Kāmikāgama*, LIV, 1; *see* under PRASTARA.)

A moulding of the entablature (*M.*, XVI, 63; *see* the list of mouldings under PRASTARA.)

MEGHA-KĀNTA—A type of storeyed building.

A class of ten-storeyed buildings (*M.*, XXVIII, 16–17; *see* under PRĀSĀDA.)

MERU—A class of buildings mostly storeyed.

(1) A type of buildings which are hexagonal (in plan), have twelve storeys, variegated windows and four entrances, and are 32 cubits wide.

(*Bṛihat-saṁhitā*, LVI, 20; *see J. R. A. S.* N. S., Vol. VI, p. 318.)

Pañcha-chatvāriṁśan-meru-lakshaṇādhyāyaḥ—the chapter on the description of forty-five kinds of Meru buildings; they are described by the following authorities:

(2) *Prāsāda-maṇḍaṇa-Vāstu-śāstra* of Sūtradhāra Maṇḍaṇa (Chap. VI, Ms. Egg. 3146, 2253, fol. 26 *b*).

(3) *Matsya-Purāṇa* (Chap. CCLXIX, vv. 28, 31, 53, *see* under PRĀSĀDA).

(4) *Bhavishya-Purāṇa* (Chap. CXXX, v. 27; *see* under PRĀSĀDA.)

(5) *Agni-Purāṇa* (Chap. CIV, vv. 14–15; *see* under PRĀSĀDA.)

(6) *Garuḍa-Purāṇa* also describes the same kind of Meru temple as the *Agni-Purāṇa*:

Śata-śṛiṅga-samāyukto meruḥ prāsāda-uttamaḥ।
Maṇḍapās tasya karttavyā bhadrais tribhir alaṅkṛitāḥ॥

(Chap. XLVII, v. 24, cf. also v. 39; *see* under PRĀSĀDA.)

(7) A building with eight śālās (compartments) and eight kūṭas (towers or domes) :

Merur nāma iti khyātas tv-ashṭa-śālāshṭa-kūṭakam(-ḥ) ॥

(*Suprabhedāgama*, XXXI, 43.)

(8) ' Meru denotes a particular kind of temple (hexagonal with twelve stories, variegated windows, and four entrances, *Bṛihat-saṁhitā*, LVI, 20.)'—(Jabbalpur copperplate of Yasahkarnadeva, v. 13, *Ep. Ind.*, Vol. II, pp. 4, 6, note 42.)

(9) *See* Bheraghat inscrip. of the Queen Alhana Devi (v. 9, *Ep. Ind.*, Vol. II, pp. 11, 15).

(10) Kanaka-si-(śi)glapita-gagana-khelat-khecharī-chakra-khedaḥ ।
Kim aparam iha kās(ś)yāṁ yasya dughdhābdhi-vīchī-valaya-
bahalakīrtteḥ kīrttanaṁ karṇṇa-meruḥ ॥

' Of him whose fame is like the circle of waves of the milky ocean, need we say more than that here at Kāśī there is a temple (erected by him), Karṇa-meru (so lofty), that the wind of the flags which wave from its golden spires lessens the fatigue of the damsels of heaven, when playing in the sky.'—(Khairha plates of Yasahkarnadeva, v. 13, *Ep. Ind.*, Vol. III, pp. 211, 212, 216.)

(11) ' Meru is primarily the name of the fabulous golden mountain (hemādri), the centre of Jambu dvīpa on which the gods dwell (surālaya), and it is figuratively applied in geographical names to any hill covered with splendid temples and palaces.'

' Another figurative meaning of Meru, derived from the notion that mount Meru is the home of the gods, a large temple with six towers, twelve stories and wonderful vaults (*Bṛihat-saṁhitā*, LVI, 20).'

' According to *Prabandha-chintā-maṇi* (p. 134, *see* also p. 175 f.) King Karṇa of Gujarat constructed a building of this kind, called Karṇa-meruḥ Prāsādaḥ, in Aṇhilvād.'

' Similarly the *Prabhāvaka-charitra* (XII, 402) mentions a Śiva temple called Siddha-meru.'

' As regards the name Ajaya-meru, its meaning is no doubt (as the *Pṛithvī-rāja-vijaya*, v. 100, suggests), the Meru made by Ajaya-rāja.'

' Thus we have in Rājputānā Jesala-meru (this form is still used by Pandits and Yatis, and occurs regularly in the colophons of the palm-leaf manuscripts in the inscriptions and the Jaina books), ' the Meru made by Jesala,' which primarily denotes the hill-fort, rising with its temples and palace above the town of Jesalmer or Jesalmīr in Marvāḍ, Komalmer, properly Kumbhala-meru, ' the meru built by Kumbhala or Kumbha-karṇa,' which is the well-known hill-fort in Mevāḍ. (In the *Rajputana Gazetteer*, Vol. III, p. 52, the fort is called Komalgarh, while Col. Tod

gives Komalmer). The name Kumbhala-meru occurs in the Jaina Paṭṭāvālis (*see* the description of the Kharatara, no. 56, Śrīpuj-Jina-samudra, *Ind. Ant.*, Vol. XI, p. 249), and Balmer or Barmer, properly Bāhaḍa-meru, the Meru made by Bāhaḍa, a hill-fort in Mallānī (*Rājputana Gazetteer*, Vol. II, p. 271). The form Bāhaḍa-meru is used by the Jainas (*see* the description of the Kharatara, no. 58, Śrīpuj-Jina-samudra, *Ind. Ant.*, Vol. XI, p. 249). In Kaṭhiāvāḍ, there is Jhānjmer, (*Bombay Gazetteer*, Vol. VIII, p. 459) properly Jhañjha-meru, the Meru made by Jhañjha, and in the Central Provinces there is another Ajmir-garh, properly Ajaya-meru-gadha, the fort, i.e., the Meru made by Ajaya.'—(Origin of the town of Ajmer and of its name, Dr. Bühler, *Ind. Ant.*, Vol. XXVI, p. 164, last para., notes 11–15.)

(12) ' There are other temples in honour of the holy mount Girnar . . . in the south wing being Sameta Śikhara and the other Su-meru or a personified mount Meru.'—(Ahmadabad Jaina temples, *Arch. Surv.*, New Imp. Series, Vol. XXXIII, p. 85.)

(13) ' Mandiram had the surname Jaya-meru-Śrī-Karaṇa-maṅgalam (lines 11 and 15 f.), which seems to be derived from Jaya-meru, one of the surnames of the Bana king Vikramāditya.'—(Inscrip. of Rajaraja I, no. 50, *H.S.I.I.*, Vol. III, p. 103, para. 2.)

MERU-KĀNTA—A type of storeyed building.

(1) A class of three-storeyed buildings (*M.*, XXI, 41–49, *see* under PRĀSĀDA).

(2) A type of building (*Kāmikāgama*, LXV, 31 ; *see* under MĀLIKĀ).

MERUJA—A type of building, a class of pavilions.

(*M.*, XXXIV, 160 ; *see* under MAṆḌAPA.)

MESHA-YUDDHA—A kind of joinery.

(*M.*, XVII, 93, 112–113 ; *see* under SANDHI-KARMAN.)

MAULI—A head-gear, a crown.

Mānasāra (Chap. XLIX, 1–232, named Mauli-lakshaṇa) :

Various crowns and head-dresses are described : Jaṭā, Mauli, Kirīṭa, Karaṇḍa, Śirastraka, Kuṇḍala(Kuntala), Keśa-bandha, Dhammilla, Alaka, Chūḍa, Makuṭa, and Paṭṭa (lines 13–15).

Of these, the Paṭṭas are sub-divided into three kinds, namely, Patra-paṭṭa, Ratna-paṭṭa, and Pushpa-paṭṭa (line 16). Kuntala, Keśa-bandha, Dhammila, Alaka and Chūḍa are apparently various fancy modes of hair-dressing. Jaṭā (clotted hair) and Makuṭa (*lit.* diadem) are stated to suit Brahmā and Śiva (Rudra) ; Kirīṭa and Makuṭa are prescribed for Vishṇu in his different forms, such as, Nārāyaṇa and others (lines 17–18).

Other petty gods wear Karaṇḍa and Makuṭa (line 19). The love goddess Ratī (Manonmanī) wears Jaṭā, Mauli, Maṇḍala or Kuṇḍala. Sarasvatī and Sāvitrī put on Keśa-bandha and Kuṇḍala. All the female deities may wear Karaṇḍa or Makuṭa. The kings Chakra-vartin (Sārva-bhauma) and Adhirāja wear Kirīṭa, Narendra puts on Karaṇḍa, Pārshṇika uses Śirastraka, or the Chakra-vartin and other kings may, as stated, wear Karaṇḍa or Makuṭa. Patra-paṭṭa is stated to be suitable for the king Paṭṭa-dhara, Ratna-paṭṭa for Pārshṇika, Pushpa-paṭṭa for Paṭṭa-bhāj, and Pushpa-mālya (flower wreath) for Astra-grāha (lines 20–28).

Kuṇḍala (Kudmala) and Makuṭa are prescribed for the queen of Chakra-vartin, Keśa-bandha for the queens of Adhirāja and Narendra, Dhammilla and Kumuda for the queens of Pārshṇika, Paṭṭa-dhara, Maṇḍaleśa and Paṭṭa-bhāj, and Alaka and Chūḍa for the queens of Astra-grāha (lines 29–33).

The height, etc., of a crown is determined in comparison with the width of the face of the wearer. Different proportions are suggested in different cases (lines 34–63).

Next is described in detail the number of gold pieces and precious jewels in the crowns of the kings of various ranks and of their consorts (lines 64–88, 89–92).

Forms of these crowns are then described :

> Jaṭā, Makuṭa, Keśa-bandha and Dhavala (? Dhammilla) are stated to be shaped like tri-purusha (*lit.* three ancestors or the length of three men) Kirīṭa like veṇu-karṇa (bamboo-ear), Karaṇḍa like the beak of a peacock, Śirastra like budbuda (water bubble), and Dhammilla like vallika (creeper) (lines 93–95).

Then follows the description of the plan and the various parts of these crowns, as well as of their measurement (lines 96–168).

MAULIKA—A type of pavilion, a class of halls, a type of building.

A type of pavilion with six faces (*M.*, XXXIV, 554 ; *see* under MAṆḌAPA.)

A class of halls (*M.*, XXXV, 3, 10 ; *see* under ŚĀLĀ.)

MAULI-BANDHA—A head-gear.

(*M.*, XLIX, 109 ; *see* under BHŪSHAṆA.)

MAULI-MUṆḌA—The top part of a branch of the ornamental tree (kalpavṛiksha).

> Śākhā-mūlasya parve tu mauli-muṇḍaṁ cha yojayet ।
>
> (*M.*, XLVIII, 66.)

Y

YAKSHA—A class of demi-gods, the attendants of Kubera or the god of wealth, who guard his treasures ; they are also the chowry-bearers of other gods. They are stated to be measured according to the nine tāla ; they assume a purely human appearance, possess two arms and two eyes, dark blue and yellow complexion, and benevolent disposition.

(*M.*, LVIII, 2–5 ; *see* TĀLA-MĀNA.)

YAJÑA-KĀNTA—A type of five-storeyed building.

(*M.*, XXIII, 34–41 ; *see* under PRĀSĀDA.)

YAJÑA-BHADRA—A type of building, a pavilion with four pillars.

(*Matsya-Purāṇa*, Chap. CCLXX, v. 11 ; *see* under MAṆḌAPA.)

YANTRAKA—An architectural member of the bedstead, a band, a machinery or wheel at the legs to move a couch easily.

Pādāgre chāntarālaṁ syāt kuryāt tiryak cha yantrakam ।

(*M.*, XLIV, 13.)

YAMA-SŪRYA—A type of building, a house with a western and northern hall.

(*Bṛihat-saṁhitā*, LIII, 39.)

YAMA-KĀNTA—A type of storeyed building.

A class of five-storeyed and eleven-storeyed buildings.

(*M.*, XXIII, 25–29, XXIX, 16–18 ; *see* under PRĀSĀDA.)

YĀGA-MAṆḌAPA—A sacrificial pavilion.

(*M.*, XXXIV, 37 ; XXXII, 65, etc.)

YĀGA-ŚĀLĀ—A sacrificial hall.

(*M.*, XXXII, 55, etc.)

YĀNA—A conveyance, a car, one of the four kinds of Vāstu consisting of Ādika, Syandana, Śibikā, and Ratha.

(*M.*, III, 3, 9–10.)

YŪPA-STAMBHA—The sacrificial pillar (*see* under STAMBHA).

R

RAKTA-KAMPA—A moulding of the base, a fillet.

(*M.*, XIV, 287 ; *see* the list of mouldings under ADHISHṬHĀNA.)

RAKTA-PAṬṬA (*cf.* RATNA-PAṬṬA)—A moulding of the base, a band.

(*M.*, XIV, 289 ; *see* the list of mouldings under ADHISHṬHĀNA.)

RAKTA-BANDHA—A class of bases.

(*M.*, XIV, 281–296 ; *see* the list of mouldings under ADHISHṬHĀNA ; *see also* XV, 223.)

RAKTA-VAPRA—A moulding of the base, the cavetto.

(*M.*, XIV, 284 ; *see* the list of mouldings under ADHISHṬHĀNA.)

RAṄGA—A pavilion, a theatre, an amphitheatre, a stage, an arena, an assembly-hall, a court, a courtyard.

(1) A pavilion within another pavilion is called Raṅga :

Maṇḍape maṇḍapaṁ yat tu raṅgam ity-abhidhīyate ॥

(*Kāmikāgama*, L, 94.)

(2) Courtyard :

Tasya madhye cha raṅge tu mauktikena prapānvitam ।

(*M.*, XXXIV, 218.)

Mukha-śālā viśālā cha chatur-bhāgaṁ tathāyatam ।
Purato'lindam ekāṁśaṁ bhittiṁ kuryāt samantataḥ ।
Mulāgre dvi-dvi-bhāgena vāsa-raṅgaṁ cha kārayet ।

(*M.*, XXXV, 117–119 ; *see also* XXIII, 50 ; XXXVIII, 44, etc.)

(3) Uttare raṅgam ity-uktaṁ tad-gṛihiṇyā gṛihaṁ bhavet ॥
Eka-śālā praśastā syāt strīṇāṁ raṅgopajīvinām ॥
Pradhāna-śālā yatraiva raṅga-sthānaṁ vidhīyate ॥
Raṅga-bhitti-samāyuktaṁ dhāma-sopāna-saṁyutam ॥

(*Kāmikāgama*, XXXV, 47, 60, 62, 64.)

RAṄGA-PĪṬHA—The stage proper.

(Bharata's *Nāṭya-śāstra*, II, 66, 771, 102.)

See details under NĀṬYA-GṚIHA.

RAṄGA-BHŪMI—The stage, the playhouse (*see* details under NĀṬYA-GṚIHA).

RAṄGA-MAṆḌAPA—A pavilion, an assembly-hall, a council chamber, the stage proper (Bharata's *Nāṭya-śāstra*, II, 68, 96), the whole playhouse including auditorium also (*ibid.*, II, 91). Music hall as defined in the *Bhāvaprakaśana* (X, 518), implying singing, playing upon musical instruments, dancing and acting jointly or separately. *See* details under NĀṬYA-GṚIHA (VEŚMA).

Cf. Nāṭ (nṛitta) mandira implying the detached maṇḍapa or hall in front of a temple, where the visitors assemble and indulge in religious music.

(1) An assembly-hall (Hampe inscrip. of Krishnaraya, lines 24, 32, north face).

'In the Zeitschrift der Deutschen Morgenlandischen (Bd. LVIII, s. 455) Dr. Bloch makes some remarks respecting a cave in Rāmgarh hill in Sargūjā, which from its arrangement and inscriptions appears to have been evidently intended for dramatic performances.'

'The so-called queen's cave and that of Ganeśa cave in Udayagiri are further undoubted examples, to the reliefs of which Jacobi has directed my attention : they represent the doings of these ladies and gentlemen (actresses and actors) in a highly realistic way. The cave-theatre discovered by Bloch has, however, a special interest : it is arranged after the Greek pattern.'

Prof. Lūders refers to Kālidāsa (1) dari-gṛiha (*Kumāra-sambhava*, 1, 10, 14) ; (2) Śilā-veśman (*Megha-dūta*, 1, 25).

(Indian Caves as Pleasure-resorts, *Ind. Ant.*, Vol. XXXIV, p. 199, para. 3 ; p. 200, para. 1.)

(2) Iraṅgada happaḷigeyuman imahā-sopāna paṅtiyumaṁ rachisidaṁ Śrī-Gommaṭa-devara suttalu raṅgama-happaligeym bigiyisidan—'had this raṅgada happaḷige (? painted hall or hall of assembly) and the flight of grand stairs laid out ; had the raṅgama happaḷige set up around Śrī-Gommaṭa Deva.'—(*Ep. Carnat.*, Vol. II, no. 115 ; Roman Text, p. 87 ; Transl., p. 171.)

(3) Kārite vīra-Ballāḷa-paṭṭana-svāmināmunā ।
Nāgena Pārśva-devāgre nṛitya-raṅgāśma-kuṭṭime ।

'By Nāga, the Vīra-Ballāḷa, paṭṭana-svāmi, were built the dancing hall and terrace of Pārśva Deva.'

Nṛitya-raṅgamumaṁ mādisida—'and in front of the basadi of Kamaṭha Pārśva Deva stone pillars and a dancing hall' were made.—(*Ep. Carnat.*, Vol. II, no. 130 ; Roman Text, p. 99, lines 1–4 ; Transl., p. 178, para. 1.)

RAṄGA-MUKHA—A class of buildings, the forepart of a theatre or stage.

(*Kāmikāgama*, XLV, 52 ; *see* under MĀLIKĀ.)

RAṄGA-ŚĪNSHA—The forepart of the stage, the platform made of wood (Bharata's *Nāṭya-śāstra* II, 71). *See* details under NĀṬYA-GṚIHA (-VEŚMA).

RATNA-KALPA—A kind of ornament prescribed for idols and kings.

(*M.*, L, 3 ; *see* under BHŪSHAṆA.)

RATNA-KĀNTA—A class of six-storeyed buildings.

(*M.*, XXIV, 19 ; *see* under PRĀSĀDA.)

RATNA-GṚIHA—The jewel-house, the adytum of a Buddhist temple, a stūpa or tope.

Ratna-gṛihecha dīpako jvalatu | mama chāparārddhāt pañchaiva bhikshavo bhuṁjatāṁ ratna-gṛihe cha dīpaka iti ||

'From the interest of the dināras given by him . . . let a lamp burn in the jewel-house . . . and with the other half . . . let the same number of five Bhikshus be fed and a lamp burn in the jewel-house.'

'It seems to denote the stūpa itself, as the abode of the three ratnas or jewels or precious stones, viz. (1) Buddha, (2) Dharma, the law or truth, and (3) Saṁgha, the community or congregation.'

This rendering of the term by the whole 'stūpa' seems unsuitable to the contest: a lamp was provided to light up the ratna-gṛiha which must imply a room or a particular part thereof, and not the whole 'stūpa.'—(Sanchi stone inscrip. of Chandragupta II, lines 9–10, *C. I. I.*, Vol. III, F. G. I., no. 5, pp. 32, 33–34, note 5 on p. 33.)

RATNA-PAṬṬA—A moulding, a jewelled band, a jewelled turban.

A moulding of the pedestal (*M.*, XIII, 84; *see* the list of mouldings, under UPAPĪṬHA.)

A head-gear (*M.*, XLIX, 16; see under BHŪSHAṆA).

RATNA-PĀDA—Otherwise called Śrīpāda, the footprint of Buddha, on Adam's Peak in Ceylon. For details *see* BUDDHA-PĀDA.

RATNA-PUSHPA—A diamond flower, an ornament.

(Deopara inscrip. of Vijayasena, v. 11, *Ep. Ind.*, Vol. I, pp 308, 313.)

RATNA-BANDHA (*see* RAKTA-BANDHA)—A class of bases.

(*M.*, XIV, 281–296; *see* the list of mouldings under ADHISHṬHĀNA.)

RATNA-MAṆḌAPA—A kind of pavilion.

(*M.*, XXXII, 48; *see* MAṆḌAPA.)

RATNA-RAṄJAKA—One of the three library buildings in the University of Nalanda (*see* under DHARMAGANJA).

RATNA-SĀGARA—One of the three library buildings in the University of Nalanda (*see* under DHARMAGANJA).

RATNI (*cf.* ARATNI)—A measure of 21 aṅgulas or about 16 inches.

Ratnir aṅgula-parvaṁ saṁkhyayā tv-eka-viṁśatiḥ |

(*Brahmāṇḍa-Purāṇa*, Part I, 2nd anushaṁgapāda· Chap. VII, v. 98,)

. A measure equal to the cubit with closed or clenched fist (*Suprabhed-āgama*, XXX, 24).

RATNODADHI—One of the three library buildings in the University of Nalanda. It was nine-storey high and stocked the sacred scriptures, *Prajña-pāramita-sūtra*, and the Tantric works such as *Samajaguhya*, etc. (*See* under DHARMAGANJA).

RATHA—A chariot, a carriage, a car, a vehicle, a tank, a war chariot, the body, a limb, a shrine.

(1) *Mānasāra* (Chap. XLIII, 1–107, named Ratha) :

Rathas are constructed for ceremonial and ordinary drives of idols, Brahmans and kings; as well as for fighting, mock-fighting and other purposes (lines 1, 131–133).

Wheels and other parts of Rathas, their shapes, measurement, and ornaments and mouldings are described (lines 2–3 f.). Other architectural details are also given (lines 3–11).

With regard to shape, Rathas are divided into seven classes, namely, Nabhasvān-bhadraka, Prabhañjana-bhadraka, Nivāta-bhadraka, Pavana-bhadraka, Pṛishada-bhadraka, Indraka-bhadraka, and Anila-bhadraka (lines 112–115). The first of these is square, the second hexagonal; the third should have two bhadras or porticoes (? storeys) and the fourth three porticoes, the fifth and the sixth should have ten porticoes, and the last one should have twelve porticoes (lines 117–120). But according to some, the seven shapes proper are respectively semi-circular, circular, elliptical, rectangular, octagonal, hexagonal, and oval (lines 121–123).

Rathas are further divided into four types, namely, Nāgara, Drāviḍa Andhra, and Vesara. The square Rathas are called Nāgara, the octagonal ones Drāviḍa, the hexagonal ones Andhra, and the round ones Vesara (lines 124–125).

In accordance with various purposes, Rathas are furnished with different kinds of wheels and other parts. Thus a war chariot or tank has three wheels, the chariot for mock-fighting has four wheels, one for ordinary festival is furnished with five wheels, one for special festival may have six, seven, eight, nine or ten wheels (lines 131–37).

The number of vedis or platforms, storeys, etc., of these Rathas as well as the Rathas of the Bauddhas and of the Jinakas are described (lines 138–171, 3–111).

(2) Svarṇaiḥ sughaṭitaṁ sādhu-ratha-trayam alaṁkṛitam ।
Dukūla-ratna-mālādyair bahu-mūlyair dṛiḍhaṁ mahat ॥

(*Skanda-Purāṇa*, Vaishṇava-khaṇḍa-dvitīya, Chap. XXV, v. 8.)

(3) 'On the east elevation of the temple . . . eight small shrines (known as Ratha) stand in a row from north to south on each side of the eastern entrance, six on the left.'

'The Ratha, on the extreme left, stands completely detached. It is a square shrine, with carved panels on the back of the chamber.'

'A small platform is in front, with yāli piers (block uncarved), each having its capital complete.'

'The basement is a square granite plinth, and square free stone course with semi-octagonal moulding over; the upper base is a square granite course on which the superstructure rests; on the wall head over the pilasters are brackets which carry the cornice.'

'As these shrines are very similar to the monoliths at Māmallāpuram, known by the name of Rathas, the term is here used advisedly.'—(Pallava Architecture, *Arch. Surv.*, New Imp. Series, Vol. XXXIV, p. 22, paras. 3, 4, 5, 6 : note 96 ; *see* Plate XXV.)

RATHAKA—A type of building, a shrine, a temple.

Ashṭamāṁśena garbhasya rathakānāṁ tu nirgamaḥ ।
Paridher-guṇa-bhāgena rathakāṁs tatra kalpayet ॥
Tat-tṛitīyena vā kuryād rathakānāṁ tu nirgamaḥ ।
Vāma-trayaṁ sthāpanīyaṁ rathaka-tritaye sadā ॥

(*Agni-Purāṇa*, Chap. XLII, vv. 13–14.)

Nemiḥ pādona-vistīrṇā prāsādasya samantataḥ ।
Paridhes trayāṁśako madhye rathakāṁs tatra kārayet ॥

(*Ibid.*, Chap. CIV, v. 7.)

RATHA-KUMBHA—A pitcher-like part of the column.

(*M.*, XV, 68 ; *see* under STAMBHA.)

RATHA-VĪTHI—The broad road fit for driving chariot and other vehicles, the highway, the main street.

(*See Kāmikāgama*, under RĀJA-VĪTHI.)

RAHASYĀVĀSA-MAṆḌAPA—A pavilion where kings reside in secret, a bed-room, a private chamber.

(*M.*, XL, 147 ; *see* under MAṆḌAPA.)

RĀJA-GṚIHA—The royal palace.

(*See* details under RĀJA-HARMYA.)

RĀJA-DHĀNI (*see* under NAGARA)—The king's residence, the capital city where the king usually resides, the seat of Government, the metropolis.

Definition :

Vidyā-sthānaṁ tu tadvat syāt bahu-senā-samanvitam ।
Rāja-veśma-samāyuktā rāja-dhānīti kathyate ॥

(*Kāmikāgama*, XX, 14.)

Cf. ' With myriads of people, practices of virtue, agreeable occupations, streams of the (nine) sentiments, pleasure-gardens, separated lovers, splendid tanks, full lotus beds, gilded boats for spring-festivals, ghaṭikā-sthānas (religious centres), the supports of dharmma and mines of enjoyment, moats which were as if the sea being overcome had returned here on account of the collection of gems, groups of the lotus-faces of beautiful women fair as the moon (grāma-nagara-kheḍa-kharvvaṇa-maḍaṁba-droṇa-mukha-pura-paṭṭana-rāja-dhānī), on whatever side one looked, in these nine forms did the Kuntala-deśa shine.'—(*Ep. Carnat.*, Vol. VII, Shikarpur Taluq, no. 197 ; Transl., p. 124, para. 1, last seven lines ; Roman Text, p. 214, line 27 f.)

RĀJA-PATHA—The broad street, the big road, the highway.

Dhanūṁshi daśa-vistīrṇaḥ śrīmān rāja-pathaḥ kṛitaḥ ।
Nṛi-vāji-ratha-nāgānām asaṁbādhas tu saṁcharaḥ ॥
Dhanūṁshi chāpi chatvāri śākhā-rathyāś cha tair mitā ।
Trikā rathyoparathyāḥ syur dvikāś chāpy-uparathyakāḥ ॥
Jaṅghā-pathaś chatush-pādas tri-pādaṁ cha gṛihāntaram ।
Dhṛiṭi-mārgas tūrddhva-shashṭhaṁ kramaśaḥ padikaḥ smṛitaḥ ॥

(*Brahmāṇḍa-Purāṇa*, Part I, 2nd annushaṁga-pāda, Chap. VII, vv. 113, 114, 115.)

RĀJA-VĪTHI—The public road, the broad street, a road which runs round a village or town, also called Maṅgala-vīthi and Rathavīthi.

Rāja-vīthīti vikhyātā grāmāder bahir-āvṛitā ।
Saiva maṅgala-vīthīti ratha-vīthīti kathitā ॥

(*Kāmikāgāma*, XXI, 2.)

RĀJA-HARMYA—The palace of a king.

Mānasāra (Chap. XL, 1–160, named Rāja-gṛiha) :

Palaces are divided into nine classes with regard to their size and as they belong to the nine classes of kings, namely, Sarvabhūpa (or Sārva-bhauma, otherwise called Chakra-vartin) (lines 32, 1-9), Mahā-rāja (lines 10–15), Narendra (lines 16–19), Pārshṇika (lines 19–22), Paṭṭa-dhara (lines 23–25), Maṇḍaleśa (lines 26–28), Paṭṭa-bhāj (lines 29–31), Prāhāraka (lines 32–36), and Astragrāha (line 37).

Each palace admits of three sizes, namely, the largest, the intermediate and the smallest, both as regards the measurement of dimensions (lines

4, 10, 15, 36) and the number of walls, storeys, rooms, ditches, gardens, etc. (lines 38–69). Thus three kinds of breadth are given to each palace. The length and height are determined in comparison with the breadth. The former (length) may vary from being equal to the breadth to being 2¼ times of it. Height is determined mostly by the number of storeys, rules for which have been discussed in another place (*see* under TALA and BHŪMI-LAMBA). The number of storeys a palace should possess, has also been discussed in the same place. The enclosure, surrounding moat, etc., of each palace are briefly described in the present chapter. But the main object of the chapter is to give an account of inner and outer buildings belonging to royal palaces (lines 71–111, 112–153).

The Brahma-pīṭha or royal chapel is installed in the Bramasthāna or central part (lines 156–159). The main palace is built in the best of the remaining parts called Indra, Varuṇa, Yama, Pushpadanta, etc. Round the palace proper are arranged all other houses, such as the houses for the queen and the princesses, for private council hall, drawing-room, dressing-room, bathroom, dining hall, kitchen, bed-chambers, quarters for attendants, places for tanks and inner gardens, etc. (*cf.* Shoḍaśa-mandira-chakra).

Beyond the royal harem, the charm and luxuries of which are so well-known, are placed the official quarters, including residences of the crown prince, family priest, ministers, and others.

The royal council and other offices are suitably accommodated: e.g., the palace of peace and war office are directed to be built at the fourth compound in the southern side of the palace (line 148). Pleasure gardens, flower gardens, groves, tanks, etc., are gracefully laid out. Compare the following:

> Yāmye cha soma-dig vāpi vāyavye vātha nairṛite ।
> Āsthāna-maṇḍapaṁ kuryāt pushkariṇyāṁ cha vāyave ।
> Nāgasya vāmake yāmye kuryād ārāma-deśakam ।
> Pushpodyānaṁ tataḥ kuryāt mukhya-bhallāṭake'pi cha ।
> Nṛittāgāraṁ tataḥ kuryān nānā-nṛittāṅganāni cha ।
>
> (*M.*, XL, 117–121.)

> Tritīye vīthis tasyāṁśe rahasyāvāsa-maṇḍapam ।
>
> (*Ibid.*, 147.)

> Iśe vā vitathe chaiva raṅga-maṇḍapam eva cha ।
>
> (*Ibid.*, 152.)

Stables, cow-sheds, etc., where domestic animals are kept, are generally built near the main gate:

> Dvauvārika-pade chaiva mayūrālayam eva cha ।
> Dvārasya dakshiṇe pārśve vyāgrakālayam eva cha ।
>
> (*Ibid.*, 144–145.)

Pārśvake mesha-śālā cha satyake vānarālayam ।
Somād īśāna-paryantaṁ vāji-śālāṁ prakalpayet ।
Yāmyādi-pāvakāntaṁ syād gaja-śālāṁ prakalpayet ।
Tasmāt tu nairṛityāntaṁ kukkuṭālayam eva cha ।
Vāyu-koṇādi-mukyāntaṁ mṛigāṇāṁ hariṇālayam ।

(*Ibid.*, 128–132.)

The elevated platforms to see the mock-fight from are also placed near the door (lines 148–150). The iron-pike (śūla-kampa) for capital punishment is placed in a prominent place near the gate (line 135). But the jail (kārāgāra) is built in a rather out-of-the-way place, such as the Bhṛiśa, or the Antariksha part.

All these are given by way of illustrations, the most part of the arrangement being left, as stated here, to the discretion of the artists, and the choice of the king (line 155).

RĀJAṄGA—The royal court, persons forming the king's suite or council, anything related to the king, the royal palace.

In a chapter (XLI), named Rājaṅga, of the *Mānasāra* are described the nine classes of kings, their courts, kingdoms, royalties and some special characteristics.

'Had a palace (Rājāṅga) built for Goparāja to the west of that pond.'—(*Ep. Carnat.*, Vol. x, Malur Taluq, no. 4; Roman Text, p. 187; Transl., p. 156.)

RUCHAKA—A type of building, a class of columns.

(1) Prāk-paśchimāvalindāv-anta-gatau tad-avadhi-sthitau śeshau ।
Ruchake dvāraṁ na śubhadam uttarato'nyāni śastāni ॥

'The (building called) Ruchaka has a western and eastern terrace running to the end, and between their extremities two others. A northern door in it brings evil, doors on any other side are auspicious.'—(*Bṛihat-saṁhitā*, LIII, 35, *J. R. A. S.*, N. S., Vol. VI, p. 286.)

Sama-chaturaśro ruchakaḥ—a column with four rectangular sides is (called) ruchaka (*ibid.*, v. 28).

A kind of quadrangular building :

(2) *Agni-Purāṇa* (Chap. CIV, vv. 14–15 has 'Charuka,' *see* under PRĀSĀDA).

(3) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 24–25; *see* under PRĀSĀDA).

RUCHIRA—A kind of pedestal or platform at the bottom of a column, a portico.

Garbha-māna-pramāṇena prāsādaṁ śṛiṇuta dvijāḥ ।
Vibhajya navādhā garbhaṁ madhye syāl liṅga-pīṭhikā ॥
Pādāshṭakaṁ tu ruchiraṁ pārśvataḥ parikalpayet ।
Mānena tena vistāro bhittīnāṁ tu vidhīyate ॥

(*Matsya-Purāṇa*, Chap. CCLXIX, vv. 15–16.)

RUDRA-KĀNTA—A type of building, a class of columns.

The sixteen-sided or circular pillars (*M.*, XV, 21 ; *see* under STAMBHA).

A class of four-storeyed buildings (*M.*, XXII, 34–43 ; *see* under PRĀSĀDA).

RUDRA-BANDHA—A kind of band, an ornament.

(*M.*, LI, 69 ; *see* under BHŪSHAṆA.)

RUPOTTARA—A type of entablature (*see* PRASTARA).

Cf. Athochcham pāda-vistāram rūpottaram ihoditam ।

(*Kāmikāgama*, LIV, 6, etc.)

RAURAVA—A type of storeyed building.

A class of nine-storeyed buildings (*M.*, XXVII, 10 ; *see* under PRĀSĀDA).

L

LAKSHMĪ-SK(-ST)AMBHA (*see* STAMBHA)—A type of column : the main pillar of a house, which is believed to be the abode of the guardian angel of the house.

LAMBANA—A pendant, a moulding of the front portico, same as alambana or plinth (*M.*, XIX, 28).

(*M.*, XVIII, 285 ; *see* MUKHA-BHADRA.)

Śikharālambanāntam cha vedi-tāra-samanvitam ।

(*M.*, XIX, 27.)

Lambanordhve dalam badhyā . . . . ।

(*Ibid.*, 39.)

Utsedhe cha tri-bhāgaikam tasyādho chāgra-lambanam ।

(*Ibid.*, 170.)

Tr(i)yamśam chāgra-vistāram lambanam pañcha-bhāgikam ।

(*Ibid.*, 172.)

See also M., XX, 25, etc.

A pendant (*M.*, L, 15, etc.).

LAMBA-PATRA—An ornament shaped like a leaf.

(*M.*, LI, 73 ; *see* BHŪSHAṆA.)

LAMBA-MĀNA—The measurement along the plumb lines.

(*M.*, LV, 3–6 ; *see* under MĀNA.)

LAMBA-HĀRA—A kind of long necklace, a pendant.

(*M.*, L, 301 ; *see* BHŪSHAṆA.)

LALĀṬA(-MAṆḌAPA)—Same as muṇḍa-harmya, and chūli-harmya, a tower, a top-room.

(*M.*, XXXIV, 400, 406, 409, 414, 429, 454, 505, 568.)

Same as VAKTRA and NETRA (*M.*, XXXV, 257–260).

LĀṄGALA—The plough.

For its architectural details *see Mānasāra* (Chap. v, 55–77).

LĀṄGALĀKĀRA—Anything shaped like the plough, a pavilion with three faces, a type of hall.

(*M.*,xxxiv, 553 ; *see* under MAṆḌAPA ; xxxv, 67 ;*see* under ŚĀLĀ.)

LĀṄGALA-BHITTI—A kind of round corner wall, shaped like the plough.

Karṇe lāṅgala-bhittiḥ syād bhramarāvṛita-bāhyake ।

(*M.*, xxxiv, 333.)

Prapāgraika-dvi-bhāgaṁ vā karṇe lāṅgala-bhittikam ।

(*Ibid.*, 225.)

LIṄGA—A distinguishing mark, a badge, a symbol, an emblem, the genital organ, the image of a god, an idol, the emblematical phallus of Śiva.

(1) *Mānasāra* (Chap. LII, 1–376, named Liṅga) :

Various classifications of phalli have been given (line 2 f.). They are classified firstly into six heads : (1) Śaiva, Pāśupata, Kāla-mukha, Mahāvrata, Vāma and Bhairava ; secondly, into four : (2) Sama-karṇa, Vardhamāna, Śivāṅka and Svastika ; thirdly, into four with regard to height : (3) Jāti, Chhanda, Vikalpa and Ābhasa ; fourthly, into three types with regard to breadth or width: (4) Nāgara, Drāviḍa and Vesara (line 99) ; fifthly, into five : (5) Svayambhu or Udbhūta, Daivika, Mānusha, Gāṇava and Ārsha ; sixthly, into two : (6) Āthmārtha (for one's personal worship), and Parārtha (for others, for public worship) ; again into two : (7) Eka (single) liṅga, and Bahu-liṅga (phalli in group) ; then into many kinds : such as (8) Vajra, Svarṇa, etc., with regard to materials of which they are made ; and lastly into two : (9) Kshaṇika (for temporary worship) as contrasted with the (10) Sthira or permanent liṅga. All these kinds of phalli are described at great length. Various alternative measures are prescribed for each of them (lines 13–376). In some cases as many as 36 alternative heights have been suggested. But in most cases their number is 9. The 9 alternative heights of a phallus are determined in some cases by a comparison to different parts of the body of the worshipper (yajamāna). The height of the phallus may reach the worshipper's sex-organ, navel, heart, breast, arm-joint, chin, nose, eye, or be equal to his full height. Another comparative measurement is given with regard to the Garbha-gṛiha or adytum. Various absolute measures are also given in some cases. The set of the nine alternatives

prescribed for height may begin with one cubit and end with four cubits and a half, the increment being by half a cubit. The breadth or width of the phallus is in like manner discussed at great length.

(2) Athātaḥ saṁpravakshyāmi liṅga-lakshaṇam uttamam ।
Susnigdhaṁ cha suvarṇaṁ cha liṅgaṁ kuryād vichakshaṇaḥ ॥
Prāsādasya pramāṇena liṅga-mānaṁ vidhīyate ।
Liṅga-mānena vā vidyāt prāsādaṁ śubha-lakshaṇam ॥
(*Matsya-Purāṇa*, Chap. CCLXIII, v, 1–2.)

Etat sāmānyam uddishṭaṁ prāsādasyeha lakshaṇam ।
Tathānyaṁ tu pravakshyāmi prāsādaṁ liṅga-mānataḥ ॥
(*Ibid.*, Chap., CCLXIX, v. 7.)

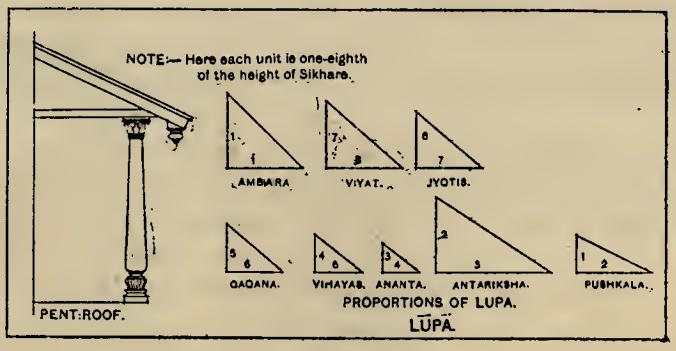
Evaṁ ratna-mayaṁ kuryāt sphaṭikaṁ pārthivaṁ tathā ।
Śubhaṁ dāru-mayaṁ chāpi yad vā manasi rochate ॥
(*Ibid.*, Chap. CCLXIII, v. 25.)

(3) In the *Bṛihat-saṁhitā* (LVIII, 53–55) where Varāhamihira seems to have condensed the details from the *Matsya-Purāṇa*, are given especially the architectural characteristics :

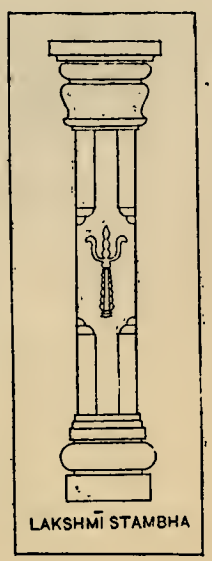
Liṅgasya vṛitta-paridhiṁ dairghyeṇāsūtrya tat tridhā vibhajet ।
Mūle tach chaturaśraṁ madhye tv-ashṭāśri vṛittam ataḥ ॥
Chaturaśram avani-khāte madhyaṁ kāryaṁ tu piṇḍikāśv-abhre ।
Dṛiśyochchhrāyeṇa samā samantataḥ piṇḍikā śvabhrāt ॥

' (For the construction of an emblem of Śiva) set out in the length the (measure of the) circumference of the round part and divide the whole phallus into three portions, of which the part at the bottom must be quadrangular, that in the midst octangular, and the rest round. (The same shapes are prescribed in the *Mānasāra*). Sink the quadrangular portion into a pit in the earth and put the middle member into the cavity of the pedestal. The pedestal is visible upwards to its cavity, in all directions over an extent equal to its height.'—(*Bṛihat-saṁhitā*, LVIII, 53, 54, *J.R.A.S.*, N. S., Vol. VI, p. 329, notes 1, 2.)

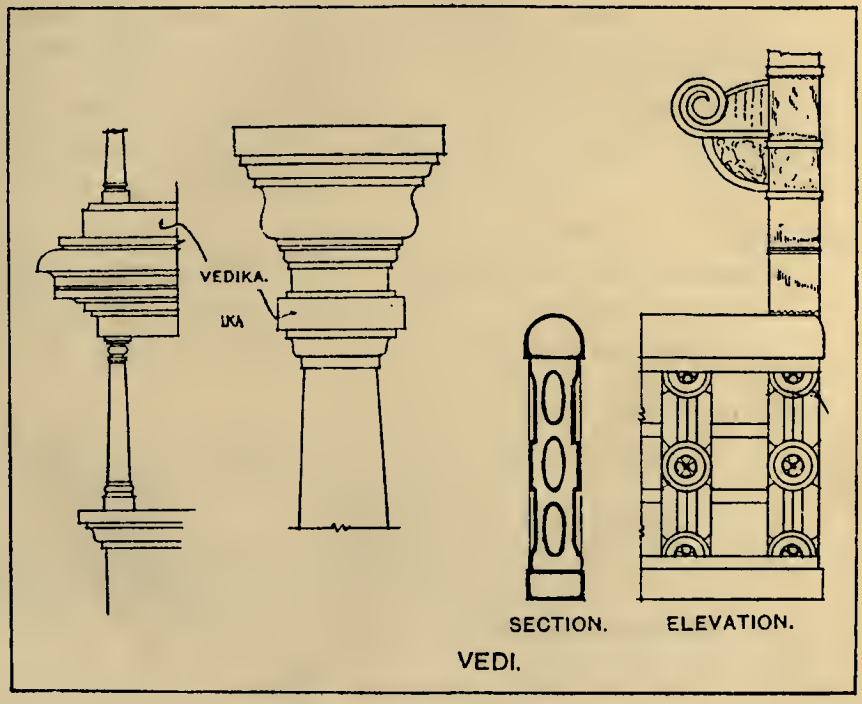
(4) Sarveshām eva liṅgānāṁ lakshaṇaṁ śriṇu sāṁpratam ॥
Madhya-sūtraṁ samāsādya brahma-rudrāntikā budhaḥ ।
Shoḍaśāṅgula-liṅgasya shaḍ-bhāgair bhājito yathā ॥
Tad vaiyamana-sūtrābhyāṁ mānaṁ antaram uchyate ।
Yavāshṭam uttare kāryyaṁ śeshāṇām yava-hānitaḥ ॥
Adho-bhāgaṁ tridhā kṛitvā tv-ardham ekaṁ parityajet ।
Ashṭadhā tad-dvayaṁ kritvā ūrddha-bhāga-trayaṁ tyajet ॥
Urddhvaṁ cha pañchamād bhāgād bhrāmya-rekhāṁ pralambayet ।
Bhāgam ekaṁ parityajya saṁgamaṁ kārayet tayoḥ ॥
Etaṁ sādhāraṇaṁ proktaṁ liṅgānāṁ lakshaṇaṁ mayā ॥
(*Agni-Purāṇa*, Chap. LIII, vv. 8–13.)



LŪPĀ.



LAKSHMĪ STAMBHA



VEDI.

(5) Svayambhuvaṁ vāṇa-liṅgaṁ daivikaṁ chārshakaṁ tu iti ।
Bhā-(Gā)navam mānushaṁ liṅgam shaṭ prakāraṁ prakīrtitam ॥
(*Kāmikāgama*, L, 35.)

Details of these Liṅgas (*see ibid.*, 36–43) are the same as given in the *Mānasāra*.

The pīṭha (pedestal) of the Liṅga (phallus) is described.—(*Ibid.*, 44–52.)

Twelve Jyotir-liṅgas :

(1) Somanātha (at Verawal, Juṇagadh State, Guzrat).
(2) Trimbakeśvara (at source of the Godāvarī, Nasik).
(3) Mummaleśvara (at Onkar, Mandhata, district Nimar, C. P.).
(4) Mahākāleśvara (at Ujjain).
(5) Kedarnātha (at Kedar, Garhwal District).
(6) Viśvanath (at Benares).
(7) Vaidyanātha (in Santal Pargana, district Birbhum, Bihar),
or
Vaijnātha (at Parli, Hyderabad State, Deccan).
(8) Rāmeśvara (at Ramnad District, Madras).
(9) Mallikārjuna (at Śrīśaila, Carnool District, Madras).
(10) Nāganātha (near Dwaraka, Guzrat, or at Oundh, Hyderabad, Deccan).
(11) Ghṛishṇeśvara (Pūrṇa-jyotish, near Ellora Caves, Hyderabad, Deccan).
(12) Bhīma-śaṅkara (30 miles from Poona).

N.B.—These do not include three other famous liṅgas, namely :
(A) Paśupatinātha (at Katmundu, Nepal).
(B) Amarnātha (in Kasmir).
(C) Kailāśanātha (on the Mānas-sarovara, in the Himalayas).

LIṄGA(-MUDRĀ)-STAMBHA—A pillar marked with the liṅga or emblem of Śiva (*see* under STAMBHA).

LU(-Ū)PĀ—A sloping and projecting member of the entablature, etc., representing a continued pent-roof ; it is made below the cupola, and its ends are placed as it were suspended from the architrave and reaching the stalk of the lotus below. Slope or breadth (*M.*, XXX, 135.)

(*See* Rām Rāz, *Ess. Arch. of Hind.*, p. 52.)

(1) Atha saṁkshipya vakshyāmo lupānāṁ lakshaṇaṁ vayam ।
Uttarasyānurūpeṇa tāsāṁ tāram udīritam ।
(*Vāstu-vidyā*, ed. Gaṇapatī Śastrī, x, 1, f.)

(2) Lūpāroha-kriyā-yuktam anyat pūrvokta-vartmanā ।
Athavā-sarva-śālāyāṁ lūpārohaṇam eva vā ॥
(*Kāmikāgama*, xxxv, 69.)

(3) In connexion with the entablature :

Lupākāraṁ tu tat kuryād dalasyākṛitir eva vā ।

(*M.*, XVI, 139 ; *see* also 20, 195.)

An account is given in great detail (*M.*, XVIII, 168–278, XXX ; 132, etc.).

The lupās (inner roof or the ceiling) prescribed for temples are technically called ambara, vyaya, jyotis, gagana, vihāyas, ananta, antariksha, and pushkala ; and those for residential buildings are called mahī, jyā, kāśyapī, kshoṇī, ūrvī, gotrā, vasuṁ-dharā, and vasudhā.

(*M.*, XVIII, 177–184.)

LOGA—Probably same as thūṇa (posts, pillar), clod, pole, memorial pillar erected after the earth is piled up from about the grave (*see* further details under THŪṆA and ŚAṄKU).

LOSHṬA (*see* KALAŚA)—A lump of earth, a clod, an architectural object resembling partly the finial.

The *Vāstu-vidhyā* (ed. Śāstri) has a chapter (XVI) named Mṛit-loshṭa-lakshaṇa (description of the lump of earth). In it loshṭa is directed to be built on the stūpi (top, dome, vv. 27, 37). At the top of a building the kalaśa (water-jar, finial) is generally built. It is variously named in this last chapter of the work : loshṭāni (vv. 28–30, 32), nīvra-loshṭāni (v. 34), krūra-loshṭāni (v. 35), koṇa-loshṭāni, puṭa-loshṭāni, ūrdhva-loshṭāni (v. 36), and svarṇādi-loshṭa (v. 39).

LOHA (*see* under ĀBHĀSA)—Iron used both as an architectural and sculptural material.

One of the metals of which idols are made :

(1) Mṛiṇmayaṁ yadi kuryāch chech chhūlaṁ tatra prakalpayet ।
Lohajaṁ tv-aviśesheṇa madhūchchhishṭena nirmitam ॥

(*Suprabhedāgama*, XXXIV, 21.)

(2) Evaṁ dvi-tryaṅgulaṁ vāpi lohajaiḥ pratimodayam ।

(*M.*, XII, 119.)

Lohajair mṛit-sudhā chaiva . . . ।
Uttamaṁ lohajaṁ bimbaṁ pīṭhābhāsaṁ tu chottamam ।

(*M.*, LI, 6, 19.)

See further illustrations under ĀBHASA.

V

VAKTRA—The face, a moulding.

A moulding of the column (*M.*, XV, 212–219).

The face (*M.*, LVII, 20, etc.).

See the lists of mouldings under ADHISHṬHĀNA and UPAPĪṬHA.

VAKRA—Bent, winding, curved, curled, a type of octagonal building.

(*Garuḍa-Purāṇa*, Chap. XLVII, vv. 21, 23, 31–32 ; *see* under PRĀSĀDA.)

VAJRA—Adamantine, forked, zigzag, a diamond, the thunderbolt of Indra, a type of column, a paste, plaster or cement, a type of building.

A column with eight rectangular sides (*Bṛihat-saṁhitā*, LIII, 28).

A paste, plaster or cement : Kalkaḥ kṛito dvitīyo'yaṁ vajrākhyaḥ ।

(*Bṛihat-saṁhitā*, LVII, 6, *J. R. A. S.*, N. S., Vol. VI, p. 322.)

A type of octangular building :

(1) *Agni-Purāṇa* (Chap. CIV, vv. 20–21, *see* under PRĀSĀDA).

(2) *Garuḍa-Purāṇa* (Chap. XXXVII, vv. 21, 23, 31–32 ; *see* under PRĀSĀDA).

VAJRA-KĀNTA—A type of storeyed building.

A class of eleven-storeyed buildings (*M.*, XXXIV, 19–25 ; *see* under PRĀSĀDA).

VAJRA-KUMBHA—A moulding of the base and the pedestal, generally placed between a cyma and petal, it is so called, as it resembles an elongated pitcher.

A moulding of the base (*M.*, XIV, 253 ; *see* the list of mouldings under ADHISHṬHĀNA).

A moulding of the pedestal (*M.*, XIII, 74 ; *see* the list of mouldings under UPAPĪTHA).

VAJRATARA—A paste, plaster, cement.

Vajrataro nāma kalko'nyaḥ ।

(*Bṛihat-saṁhitā*, LVII, 7, *J.R.A.S.*, N. S., Vol. VI, p. 322.)

VAJRADHĀTU-MAṆḌALA—The top floor of five-storeyed Nepalese temples.

(For details *see* DHARMADHĀTU-MAṆḌALA.)

VAJRA-PAṬṬA—A moulding, a diamond band, a fillet.

A moulding of the base (M., XIV, 258 ; *see* the list of mouldings under ADHISHṬHĀNA).

VAJRA-PĀDA—A diamond pillar, a type of small pillar.

A pillar of the bedstead (*M.*, XLIV, 61).

VAJRA-BANDHA—A diamond band, a type of base.

A class of bases (*M.*, XIV, 259–271 ; *see* the list of mouldings under ADHISHṬHĀNA).

VAJRA-LEPA—A paste, plaster, cement.

Kalko'yaṁ vajra-lepākshaḥ ।

(*Bṛihat-saṁhita*, LVII, 3 ; *see J.R.A.S.*, N. S., VI, p. 321.)

VAJRA-LIṄGA (*see* LIṄGA)—A kind of phallus.

(*M.*, LI, 330 ; *see* under LIṄGA.)

VAJRA-SAṀGHĀTA—A paste, plaster, cement.

Maya-kathito yogo'yaṁ vijñeyo vajra-saṁghātaḥ ।

(*Bṛihat-saṁhitā*, LVII, 8 ; *see J.R.A.S.*, N. S., Vol. VI, p. 322.)

VAJRA-SVASTIKA—A type of building.

A kind of octangular building (*Agni-Purāṇa*, Chap. CIV, vv. 20–21 ; *see* under PRĀSĀDA).

VAJRĀSANA (*see* BODHI-MAṆḌA)—A diamond throne, the miraculous throne under the Bodhi-tree at Gaya, on which Buddha and his predecessors sat when attaining perfect wisdom.

(1) ' Bodhimaṇḍa is the name of the miraculous throne under the Bodhi-tree at Bodh Gaya, also called the Vajrāsana or diamond-throne, on which Buddha and his predeccessors sat, when attaining bodhi or perfect wisdom.'—(*Ind. Ant.*, Vol. XV, p. 257, c. 1–2.)

(2) Tenaitad atra kṛitam ātma-manovad uchchair vajrāsanasya bhavanaṁ bhuvanottamasya ।

' He erected here for the diamond throne, the best thing in the world, this habitation, lofty like his own mind.'—(Ghosrawa Buddhist inscrip., lines 14–15, *Ind. Ant.*, Vol. XVII, pp. 310, 311, 308, note 5.)

VADHŪ-NĀṬAKA—A theatre for females, a gallery, a balcony.

Vadhū-nāṭaka-saṁghaiś cha saṁyuktaṁ sarvataḥ purīm ।

Commentary : vadhūnāṁ nāṭaka-śālā ।

(*Rāmāyaṇa*, 1, 5, 12.)

VANA-DURGA (*cf.* NAGARA)—A forest-fort.

(*See* details under DURGA.)

VAPRA—A rampart, a wall, a moulding of the base (plinth), cavetto, an architectural member at the upper part of a building, (parapet), a summit, a bank, a mound, a ditch, the foundation of a building, the gate of a town.

(1) Chatur-daṇḍāvakṛishṭaṁ parikhāyāḥ shaḍ-daṇḍochchhritam avaruddhaṁ tad-dvi-guṇa-vishkambhaṁ khātād vapraṁ kārayet ।

Vaprasyopari prākāram . . . . ।

(*Kauṭilīya-Artha-śastra*, Chap. XXIV, pp. 51, 52.)

(2) The surrounding wall of a village :

Grāmasya parito bāhye rakshārtham vapra-saṁyutam ।
Bāhye vapraṁ suvṛittakam . . . ।
(*M.*, VIII, 11, 37.)

Evaṁ grāma(ṁ)-prasāraṁ cha bahir vapra-saṁyutam ।
Paritaḥ parikhā bāhye vapra-yuktaṁ tu kārayet ।
(*M.*, IX, 61, 107 ; *see* also 147.)

In connexion with towers :

Etat paṭṭanam ākhyātam vaprāyata-samanvitam ।
Sarveshām api durgāṇāṁ vapraiś cha parikhair vṛitam ।
(*M.*, X, 66, 106.)

A moulding of the base (*M.*, XIV, 20, 24, etc.; *see* the list of mouldings under ADHISHṬHĀNA).

In connexion with buildings of one to twelve storeys (parapet) :

Adhishṭhāna-samaṁ mañchaṁ mañchordhve'rdhena vaprayuk ।
(*M.*, XXI, 14, etc.)

Mālikopari vapraṁ syād adhishṭhānaṁ samodayam ।
(*M.*, XXXI, 64.)

(3) Wall (Dabhoi inscrip. v. 111, *Ep. Ind.*, Vol. I, p. 31).

(4) Rampart (Badnagar Praśasti of the reign of Kumārapāla, v. 23 *Ep. Ind.*, Vol. I, pp. 300, 303).

(5) Yasyotuṁga-turaṁga-tāṁḍava-bhavaḥ prāṁśūtkaraḥ sainikaḥ svaḥ-sīmāsu marud-gaṇābhaya-mahā-vapra-prākāro'bhavat ।
(Sridhara's Devapattana Praśasti, v. 13, *Ep. Ind.*, Vol. II, p. 441.)

(6) Rāmeśvarāya ghaṇa-maṁṭapa-vapra-saudha-ramyālayaṁ samatanot samatā rasajñaḥ ।

'He erected a temple (ālaya), adorned with a solid hall (maṇṭapa), a wall and a plastered mansion (saudha) to Rāmeśvara.'—(Mangalagiri pillar inscrip., v. 39 ; *see* also vv. 29, 38, 48, *Ep. Ind.*, Vol. VI, pp. 123, 121, 122, 124, 112, 113, 114, 115.)

(7) Vapra-gopura-yutair nava-harmyaiḥ ।
(Kondavidu inscrip. of Krishnaraya, v. 26, *Ep. Ind.*, Vol. VI, pp. 237, 231.)

(8) · He, the emperor of the south, caused to be made of stone for Vijaya-Nārāyaṇa (temple), latticed window, secure door-frame (kavāṭa), door-lintel, kitchen, ramparts (udagra-vapra), pavilion, and a pond named the Vāsudeva-tīrtha.'—(*Ep. Carnat.*, Vol. V, Part I, Belur Taluq, no. 72 ; Transl., p. 61 ; Roman Text, p. 142, line 8.)

VAPRA-BANDHA—A type of base.

A class of bases (*M.*, XIV, 250, 259 ; *see* the list of mouldings under ADHISHṬHĀNA).

VAHYA—*Lit.* that which can be carried, a couch used by women (*R.-V.*, VII, 55, 8, *A.-V.*, 5, 3 women sitting on it, *A.-V.*, 20, 3 weary bride mounting it, *A.-V.* XIV, 2, 30), canopied reclining arm-chair with poles or handles for carriers, bearing all forms, a bed on which the bride mounts and lies with her groom in the marriage ritual (*A.-V.*, XIV, 2, 20).

VI(VAI)RĀṬA—A type of storeyed building, a class of twelve-storeyed buildings once prevailing in the country of Virāṭa (Jaipur).

Chatur-adhika-tri-daśa-bhāgaṁ harmya-viśālake ।
Ashṭāṁśena mahā-śālā pārśve śālā śivāṁśakam ।
Dvyaṁśaṁ pañjara-śālā tad-ardhaṁ chāntarālakam ।
Anuśālā tri-bhāgaṁ syād ekāṁśam antarālakam ।
Dvi(dvya)ṁśaṁ pañjara-śālā cha pārśve bhā(hā)raḥ śivāṁ-śakam ।
Kūṭā-nava(-nāṁ cha) dvi-bhāgaṁ syāt sarvaṁ yuktyaṁ sa-bhadrakam
Mahā-śālā yugāṁśena madhyam atra (bhadraṁ) prakārayet ।
Tale tale vimāne tu śālā-pañjāra-shoḍaśam ।
Kshudra-śālā dvi-hārā cha tan-madhye chāshṭakaṁ bhavet ।
Chatur-dikshu mahā-śālā chatush-kūṭaṁ tale tale ।
Evaṁ vairāṭa-kāntaṁ syāch chheshaṁ bhāgaṁ tu pūravat ।

(*M.*, XXX, 17–27.)

VARDHAKI—An architect, the designer, the painter.

(*See* details under STHAPATI.)

VARDHANI(Ī)—A type of building.

A class of round buildings (*Agni-Purāṇa*, Chap. CIV, vv. 17–18 ; *see* under PRĀSĀDA).

VARDHAMĀNA—A class of buildings, a type of storeyed mansion, a kind of phallus, a joinery, an entablature.

(1) A class of śālās or mansions (*M.*, XXXV, 4 ; *see* also 303, under ŚĀLĀ).
A kind of phallus (*M.*, LII, 4 ; *see* under LIṄGA).
A kind of joinery (M., XVII, 84, *see* under SANDHI-KARMAN).
An entablature (*see* under PRASTARA).

(2) Dvārālindo'nta-gataḥ praḍakshiṇo' nyaḥ śubhas tatas chānyaḥ ।
Tad-vach cha vardhamāne dvāraṁ tu na dakshiṇaṁ kāryam ॥

'The Vardhamāna has a terrace before the (chief) entrance, extending to the end ; then, when you proceed in a direction from left to right, another beautiful terrace and thereon again, another in the aforesaid direction. No southern door should be made in it.'—(*Bṛihat-saṁhitā*, LIII, 33, *J.R.A.S.*, N.S., Vol. VI, pp. 285–286.)

(3) Vedāsyaṁ vardhamānakam—the Vardhamāna house (śālā) has four faces.—(*Kāmikāgama*, xxxv, 88.)

An entablature—(*Kāmikāgama*, LIV, 7).

VA(BA)LABHI(-Ī)—The roof, the frame of a thatch, the topmost part of a house, a class of storeyed buildings, a type of entablature, a class of rectangular buildings, a top-room, a turret, a balcony, an awning, a tent, any temporary erection on the flat roof of a house.

(1) Tri-chandra-śālā bhaved valabhī ।

'The roof must have three dormer-windows.'

Dr. Kern adds the following :

'Comm. valabhī vātāyana ; vātāyana in general means "any place whither one goes to take an airing ;" sometimes "a window" is intended by it, other times the flat "roof" of an Indian house. In the latter acceptation it is here used by Utpala, and frequently elsewhere ; e.g. *Kathā-sarit-sāgara* (95, 18) : sva-gṛihottuṅga-vātāyana-gataḥ ; (103, 162) : harmya-vātāyanāruḍhaḥ, etc.'—(*Bṛihat-saṁhitā*, LVI, 25, LVII, 4, *J.R.A.S.*, N. S., Vol. VI, pp. 319, 322, note.)

(2) A class of five-storeyed buildings (*Matsya-Purāṇa*, Chap. CCLXIX, vv. 35, 50, 53 ; *see* under PRĀSĀDA).

A type of rectangular building :

(3) *Agni-Purāṇa* (Chap. CCIV, vv. 16–17 ; *see* under PRĀSĀDA).

(4) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 21–22, 26–27 ; *see* under PRĀSĀDA).

(5) Prāsādāgravimāneshu valabhīshu cha sarvadā ।

(Rāmāyana, II, 88, 5, *see* further context under PRĀSĀDA.)

(6) Nāga-lokam . . . aneka-vidha-prāsāda-harmya-valabhī-nirūhya-śata-saṁkulam ।

(*Mahābhārata*, I, 3, 133.)

(7) A synonym of the entablature (*M.*, XVI, 19 ; *see* under PRASTARA).

A moulding of the entablature (*M.*, XVI, 79 ; *see* the list of mouldings under PRASTARA).

In connexion with four-storeyed buildings :

Nānādhishṭhāna-pādaiś cha valabhibhiś cha bahu-bidhaiḥ ।

(*M.*, XXII, 94.)

(8) Kailāśa-tuṅga-śikahra-pratimāni chānyāny-ābhānti dīrggha-valabhīni sa-vedikāni ।

Gāndharvva-śabda-mukharāṇi nivishṭa chitra-karmmāṇi lolakadalī-vanaśobhītāni ॥

'And other long buildings on the roofs of the houses, with arbours in them, are beautiful, being like the lofty summits of (the mountain) Kailāśa ; being vocal with songs (like those of the Gandharvas ; having

pictured representations arranged (in them); (and) being adorned with groves of waving plantain trees.'— (Mandasor stone inscrip. of Kumāragupta, lines 6–7, *C. I. I.*, Vol. III, F. G. I., no. 18, pp. 81, 85.)

(9) . . . puṇyābhivṛiddhy-artham vaḍ(-l)abhīṁ kāra(ya)yitvā ananta-svāmi-pādaṁ pratishṭhāpya . . .

'Having caused (a temple having) a flat roof to be made, for the sake of increasing the religious merit of . . . (and) having installed the feet of (the god) Anantasvāmin.' . . .

'Vaḍabhi (also called valabhī, *see* above) is explained as meaning the wooden frame of a roof; a flat roof, house-top, top-room, turret, top-floor, balcony; any temporary erection on the top of a palace: an awning, a tent; but it seems to refer to a building here, and to denote a flat-roofed temple.'—(Gadhwa stone inscrip., line 2, *C. I. I.*, Vol. III, F. G. I., no. 66, p. 268, note 9.)

(10) 'Whose arms like jewelled pillars supporting the roof (valabhī) of the three worlds.'—(*Ep. Carnat.*, Vol. V, Part I, Channarayapatna Taluq, no. 179, line 2; Roman Text, p. 462, Transl., p. 202.)

VALAYA—An ornament, a type of building, a moulding.

(1) A bracelet (*M.*, XLIX, 138; L, 33, etc.; *see* BHŪSHAṆA; Deopara inscrip. of Vijayasen, v. 11, *Ep. Ind.*, Vol. I, pp. 303, 313.)

A class of round buildings:

(2) *Agni-Purāṇa* (Chap. CIV, vv. 12–18, *see* under PRĀSĀDA.)

(3) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 21, 23, 28, 29; *see* under PRĀSĀDA).

(4) The sixth moulding from the top of an entablature (*Kāmikāgama*, LIV, 9; *see* under PRASTARA).

VALLĪ (*cf.* VĀTĀYANA)—A type of window.

(*M.*, XXXIII, 483; *see* under VĀTĀYANA.)

VASATI (*see* BASADI)—A mart, a trading settlement, a quarter of a town (*Mārkaṇḍeya-Purāṇa*, Chap. XLIX, 49–50), a residence, a shrine, a Jain monastery or temple containing the image of a Tīrthaṅkara.

(Jaina Rock inscrip. at Vallimalai, no. A, v. 2, *Ep. Ind.*, Vol. IV, p. 141, note 7, and refer to Mr. Kittel's Dictionary, p. 1383.)

VASUDHĀ—The earth, a kind of pent-roof.

(*M.*, XVIII, 178; *see* under LUPĀ.)

VASTRA-NIP(Y)A—A jar-shaped ornament of the column.

Kumbha-madhye rakta(ratna)-bandhaṁ vastra-nip(y)aṁ cha vinyaset।

(*M.*, XV, 223.)

VA(VĀ)-HA-(KA, LA)—Bearing, carrying, supporting, a way, a road, a vehicle, a conveyance, a river, a channel.

(1) 'Given the village with . . . its hills and water-courses (vāhalā).
(Plate of Deva Varmadeva, line 8 f., *Ind., Ant.*, Vol. XVI, pp. 206, 207, note 33.),

(2) 'Vāhaka—a water-channel in the Gwalior inscrip. of Saṁvat 933; Hultzsch in J. D. Morg Ges., Vol. XL, p. 37 (vāhā, a watercourse, Elliot, *Suppl. Glossary*, Vol. II, p. 225); Grierson, *Bihar Pseaant Life* ss. 954).'

(3) V(b)allāla-devakasya vahaḥ।
'Water-channel constructed by Ballaladeva.'
(Lala-Pahaḍ Rock inscrip. of Narasiṁhadeva, line 6, *Ind. Ant.*, Vol. XVIII, pp. 212, 213, note 2.)

VAHANA (*see* under STAMBHA)—Conveying, carrying, supporting, flowing, a boat, a raft, a conveyance, part of a column.

Stambhaṁ vibhajya navadhā vahanaṁ bhāgo ghato'sya bhago'nyaḥ।
(*Bṛihat-saṁhita*, LIII, 29, *J. R. A. S.*, N. S., Vol. VI, p. 285.)

VAṀŚA—'A bamboo, a shaft, a flute, a reed-pipe, a cross-beam, a oint, the backbone, a term for the rafters and laths fastened to the beams of a house (as generally made of split bamboos), or laths running across a roof.'

(1) Bhojanaṁ nānuvaṁśaṁ syāch chhayanaṁ cha tathaiva cha।
Anuvaṁśa-gṛiha-dvāraṁ naiva kāryaṁ śubhārthibhiḥ॥
Dvija-gehasya vaṁśaṁ tu pūrvāgraṁ parikalpayet॥
Yāmyāgraṁ kshatriyāṇāṁ tu paśchimāgraṁ viśāṁ bhavet।
Śūdrāṇāṁ uttarasyāṁ syād esha vaṁśāgrako vidhiḥ॥
(*Kāmikāgama*, XXXV, 147, 149, 150.)

Prāg-vaṁśayor anya-vaṁśaiś cha nālikera-dalādibhiḥ।
Āchchhāditaḥ prapā nāma prastaraṁ chātra maṇḍapaḥ॥
Vaṁśādir asṁśa-sahitā śikhara-stūpikānvitaḥ।
Nāsikā-mukha-paṭṭāṁśā śāleti parikīrtitā॥—(*Ibid.*, L, 88, 90.)
Jayantī vaṁśakā jñeyā tulā-vad anumārgakam॥
(*Ibid.*, LIV, 15.)

Daṇḍikā-vāra-saṁyuktaṁ shaṇ-netra-sama-vaṁśakam।
Vaṁśopari gatāḥ śālāś chatasro' shṭānanānvitāḥ॥
(*Ibid.*, XLII, 19.)

(2) The backbone (*M.*, VII, 264; *see* also LXV, 158; LXVII, 82).
In connexion with the entablature:

Yathā-balaṁ yathā-bhāraṁ tathā vaṁśādi(ṁ) yojayet।
(*M.*, XVI, 198.)

In connexion with the pillar :

Kuṭya-vaṁśa-prati(r)-vaṁśaṁ tuṅgaṁ yat tu samaṁ bhavet ।
Tuṅgasyādhika-hīnaṁ ched dvi-paṅktiṁ nityam āvahet ।

(*M.*, XVII, 120–121.)

In connexion with the pavilion (maṇḍapa) :

Adhishṭhānaṁ vinā kuryāj janmādi-prastarāntakam ।
Athavā pada-vaṁśam cha samyuktaṁ tat prapāṅgakam ।

(*M.*, XXXIV, 14–15.)

Vaṁśa-mūlāgrayoḥ sarve karkarīkṛita-netrakam ।

(*Ibid.*, 399.)

In connexion with the hall (śālā) :

Vaṁśa-mūlāgrayor vāsaṁ vaṁśa-mūlaika-vāsakam ।

(*M.* XXXV, 128.)

Harmya-tāra-vaśād dvāraṁ vaṁśādhishṭhāna-pāduko ।

(*M.*, LXIV, 5.)

VAṀŚA-KĀNTA—A class of twelve-storeyed buildings once prevailing in Vaṁśa-(ka), the capital of Kauśāmbi.

Tad eva hāram(-rā) tan-madhye chaika-bhāgena saushṭikam ।
Vaṁśa-kāntam iti proktam śesham pūrvavad ācharet ॥

(*M.*, XXX, 31–32, *see* also 28–30, under KERALA-KĀNTA.)

VĀJANA—A square or rectangular moulding resembling a fillet, i.e. a small band which is placed between mouldings and as the uppermost member of a cornice. (For its synonyms, *see M.*, XVI, 46–47.)

Ūrdhva-vājanam ekāṁśam aṁśaṁ tat paṭṭikā bhavet ।

(*Vāstu-vidyā*, ed. Śāstri, IX, 24.)

The moulding at the top and bottom of the entablature (*Kāmikāgama*, LIV, 1 ; *see* under PRASTARA).

A crowning moulding of a column (*Suprabhedāgama*, XXXI, 108; *see* under STAMBHA).

A moulding of the pedestal (*M.*, XIII, 46, 51 ; *see* the list of mouldings under UPAPĪṬHA).

A crowning moulding of the base (*M.*, XIV, 9 ; *see* the list of mouldings under ADHISHṬHĀNA).

A moulding of dolā (swing, hammock).

Vājane cha dvi-valayaṁ syād ayasena balābalam ।

(*M.*, L, 106.)

VĀJI-ŚĀLĀ—A horse stable.

(*M.*, XL, 362 ; *see* under ŚĀLĀ.)

VĀṬA—A road, a fence, an enclosure, courtyard.

Cf. Vāṭa-bhūmi (*Kāmikāgama*, xxi, 3).

Corrupted to Bāḍa, 'enclosure of a town or village, fence, wall, hedge.'

(*Ind. Ant.*, Vol. iv, p. 211, footnote under Kampaṇa.)

VĀṬAKA—A hamlet.

Tāmara-cheru-grāmo nāma ।
Chikhalī-vāṭakena samam ekīkṛitya . . . ।

'The village named Tāmara-cheru combined the Chikhalī hamlet.'—(The Madras Museum Plates of Vajrahasta III, lines 43–44, *Ep. Ind.* Vol. ix, pp. 94–95.)

VĀṬIKĀ—A small house, a garden house, a pleasure pavilion, an orchard.

Vāme bhāge dakshiṇe vā nṛipāṇāṁ tredhā kāryā vāṭikā krīḍanār, tham ।

'At the left or right side a three-fold pavilion should be built for the sport of the kings.'—(*Śilpa-śāstra-śāra-saṁgraha*, ix, 29.)

Uttare saralais tālaiḥ śubhā syāt pushpa-vāṭikā ।

(*Matsya-Purāṇa*, Chap. cclxx, v. 29.)

Bhaktyā vidhāpitaṁ chābhyām āmrālohita-maṁdiraṁ (mā)ṭri-ha (rmye)ṇa (saṁyu)ktaṁ vāpyā vāṭikayāpi hi ।

'Out of devotion he caused to be erected a temple of red colour and surrounded it with shrine of some mātā (? three shrines), a step-well and an orchard.'—(Dhanop inscrip. of Chachcha, v. 6, *Ind. Ant.*, Vol. xl, pp. 175, 174.)

VĀTA—A type of building, a house with an eastern and southern hall.

(*Bṛihat-saṁhitā*, liii, 39; *see* under Prāsāda.)

VĀTA-KSHETRA (*see* Vātāyana)—A place for airing, a roof.

Kuṭumba-bhūmi-mānaṁ tu vāta-kshetra-vivarjitam ।

(*Kāmikāgama*, xxi, 3.)

VĀṆA-LIṄGA—A kid nof phallus.

(*Kāmikāgama*, l, 35, 36; *see* under Liṅga.)

VĀTĀYANA—A window, a porch, a portico.

(1) Description of windows (*M.*, xxxiii, 568–597):

Windows are constructed in all kinds of buildings (*ibid.*, 569–572).

The latticed windows are also prescribed:

Narāṇāṁ jālakaṁ sarvaṁ devānām api yogyakam । (572).

The measures, etc., are left to the discretion of the architects (573).

The general plan of windows is also given (574–581).

Their shapes are represented by the following designs : nāga-bandha (snake's band), vallī (creeper), gavāksha (cow's eye), kuñjarāksha (elephant's or deer's eye), svastika (cross figure), sarvato-bhadra (a figure with four façades), nandyāvarta (a figure with openings on the sides), and pushpa-bandha (flower-band) (*ibid.*, 582-584).

Their architectural details are given (*ibid.*, 585–600).

(2) Udag-āśrayaṁ cha vāruṇyāṁ vātāyana-samanvitam ।

(*Garuḍa-Purāṇa*, Chap. XLVI, v. 16.)

(3) Prakāśārtham alpam ūrdhvaṁ vātāyanaṁ kārayet ।

Pratiloma-dvāra-vātāyana-bādhāyāṁ cha anyatra rāja-mārga-rathyābhyaḥ ।

(*Kauṭiliya-Arṭha-śāstra*, Chap. LXV, p. 167.)

VĀPI(-PĪ)-(KA)—A tank, a well, a reservoir of water.

(1) A tank (Dewal Praśasti of Lalla the Chhinda, v. 20, *Ep. Ind.*, Vol. I, pp. 79, 83).

(2) 'A well with a flight of stairs, while kūpa denotes an ordinary well.'—(Maheśvara's Commentary on the *Amarakōsha*, *Ep. Ind.*, Vol. VII, p. 46, note 2; p. 41, line 58.)

(3) Dakshiṇa-diśābhāge kārāpitā vāpī tathā prapeyaṁ cha ।

'In the southern part there has been made an irrigation well and also a watering-trough.'—(Grant of Bhimadeva II, V. S. 1266, line 26–27, *Ind. Ant.* Vol. XVIII, pp. 113, 115.)

(4) Vāpī-puṭake bhūmi-hala-vāhā ।

'In the hollow ground below an irrigation well.'—(Grant of Bhimadeva II, Simba-saṁvat 93, line 7, *Ind. Ant.*, Vol. XVIII, p. 110.)

(5) 'During the reign of Gaṇapati, the son of the prince Gopāla, the ṭhakkura Vāmana built a public tank (vāpikā).'—(Sarwaya stone inscrip. of Gaṇapati of Nalapura, vv. 23–28, *Ind. Ant.*, Vol. XXII, p. 82.)

(6) Dharmmārthe svayam eva vāpī kārāpitā ।

'For charitable purpose the step-well was caused to be constructed a his own cost.'—(Manglan stone inscrip., line 6, *Ind. Ant.*, Vol. XLI, p. 87.)

VĀMA—A kind of phallus.

(*M.*, LII, 3 ; *see* under LIṄGA.)

VĀRA—A day of the week, a door, a gate, a formula of architectural measurement, a verandah.

(*M.*, XXXIV, 170, 394, 529, 538, *see* details under SHAḌ-VARGA.)

VĀRA-(KA, ṆA)—A covering, an enclosure, a door, a gate.

Kāmikāgama, XXX :

Alindasya samantāt tu bhāgenaikena vārakam ।

Pārśvayor ubhayoś chaiva chāgra-śālānusārataḥ ॥ (77)

Kāmikāgama, XXXV :

Etat sapta-talaṁ proktaṁ rājñām āvāsa-yogyakam ॥ (84)
Tad-adhastāt samantāt tu bhāgenaikena vārakam ॥ (85)
Śālā-bhāge tu alinde vā pṛithu-vārāṁśake api ।
Vinyāsas tv-ishṭa ākhyāto maṇḍapa ukta-bhūmike ॥ (93)
Vinirgamasya chāyāmo tad-vṛiddhyā tasya vistaraḥ ।
Dvi-guṇānto vidheyaḥ syād evaṁ syān madhya-vāraṇam । (102)
Madhye-vāraṇa-yuktaṁ vā tad-vihīnaṁ tu vā dvijāḥ ।
Evaṁbhūtasya vāsasya samantāt syāt khalūrikā ॥ (103)

Ibid., XLV :

Bahu-varga-yutaṁ vāpi daṇḍikā-vāra-śobhitam ॥ (16)
Parito vāram ekāṁśaṁ śālā-vyāso dvi-bhāgataḥ ॥ (23)
Bahir-vāra-samāyuktaṁ vyāsa-pārśva-dvayor api ॥ (26)
Saṁślīshṭa-vāra-saṁyuktaṁ shaṭsu chārdha-sabhā-mukham ॥ (28)
Pūrvokta-sindukaṁ (building) vāra-vṛiksha-sthala-samanvitam ॥ (31)
Agre cha pārśvayoś chaiva kuryād ekāṁśa-vārakam ॥ (38)
Tad-bahir vāram ekāṁśaṁ tad-bāhye tu vṛisha-sthalam ।
Tad-bahiś cha chatur-dikshu dvyaṁśāṁśaṁ vāra-nishkramaḥ ॥ (43)

See also vv. 44, 45, 46, 55, 56, etc.

Ibid., XLII :

Utkṛishṭe tu aṅkaṇaṁ dvyaṁśaṁ mārgas tu parito'ṁśataḥ ।
Antar-vāram athaikena śālā-vyāso dvi-bhāgataḥ ॥ (23)

See M., IX, 300, 519 ; XXXIII, 383 ; XXXIV, 119, 190, 200, 394, 408, 514 521, 526, 529 ; XXXV, 100, 120, 123, 238, 243, 265 ; XXXIX, 128, etc.

VĀSA (-KUṬI, ŚĀLĀ, SABHĀ)—Residence, synonym of an assembly-hall (*Amarakōsha*, IVI, 2, 3, 604), hall terrace.

(*M.*, XXXV, 43–46, 82–84, 127–128, 138, 142, 155–156 221, 227, 241, 250, 282, 286, 288, 383.,

VĀSANIKĀ—A dwelling for use in spring, a house for the spring festival.

Tathā vanik-Mahallakena satkā vāsanikā pradattā—' by the Mahallaka the satka (?) hamlet (? house) was given.'

Paśchimataḥ ṭhakkura-kuṁḍaṇakasya vāsanikā maryādā—' to the west the boundary is the dwelling of the Brahman Kundaṇa.'—(Shergaḍh stone inscrip., lines 12, 13, 14 ; *see* also 9, 10, 11, *Ind. Ant.*, Vol. XL, p. 176.)

VĀSA-RAṄGA (*see* RAṄGA)—The open or closed quadrangular enclosure, the courtyard of a residential building.

Purato'lindam ekāṁśaṁ bhittiṁ kuryāt samantataḥ ।
Mūlāgre dvi-dvi-bhāgena vāsa-raṅgaṁ cha kalpayet ।
(*M.*, XXXV, 118–119.)

VĀSTU—Architecture in the broadest sense implying the earth (dharā), building (harmya), conveyance (yāna), and bedstead (paryaṅka) (*M.*, III, 2–3). The building or harmya includes prāsāda, maṇḍapa, sabhā, śālā, prapā, and (a)raṅga. The conveyance or yāna includes ādika, syandana, śibikā, and ratha. The bedstead or paryaṅka includes pañjara, mañchalī, mañcha, kākāshṭa, phalakāsana and bāla-paryaṅka (*ibid.*, 7–12). The term denotes also villages, towns, forts, commercial cities, etc., a dwelling house, a group of houses (*cf.* PASTYĀ), a site (*R. V.*, IV, 37, 1, 2, *A. V.* 11, 12, 1, etc.). Sculpture is the handmaid of architecture and is secondarily implied by the term Vāstu.

(2) Nagarādika-vāstuṁ cha vakshye rājyādi-vṛiddhaye ।

(*Agni-Purāṇa*, Chap. CVI, v. 1.)

(3) Prāsādārāma-durga-devālaya-maṭhādi-vāstu-māna-lakshaṇa-nirūpaṇam ।

(*Garuḍa-Purāṇa*, Chap. XLVI, colophon.)

Cf. Āvāsa-vāsa-veśmādau pure grāme vaṇik-pathe ॥
Prāsādārāma-durgeshu devālaya-maṭheshu cha ।

(*Ibid.*, Chap. XLVI, vv. 2–3.)

(4) *Saṁgraha-śiromani* by Sarayū Prasad (XX, 1) quotes from one Vasishṭha without further reference :

Vāstu-jñānaṁ pravakshyāmi yad uktam brahmaṇā purā ।
Grāma-sadma-purādīnāṁ nirmāṇaṁ vakshyate' dhunā ॥

(5) Gṛihaṁ kshetram ārāmas setu-bandhas taṭākam ādhāro vā vāstuḥ—Houses, fields, gardens, buildings of any kind (*see* SETU), lakes and tanks are each called Vāstu.—(*Kauṭilīya-Artha-śāstra*, Chap. LXV, p. 166.)

(6) The heavenly architect Viśvakarman, the mythical originator of Vāstu, is stated to be the father of nine artisans—goldsmith (svarṇa-kāra), blacksmith (karma-kāra), brazier or utensil-maker (kāṁsya-kāra), maker of shell ornaments (śaṅkha-kāra), carpenter (sūtra-dhāra), potter (kumbha-kāra), weaver (kuvindaka), painter (chitra-kāra), and florist, gardener or garland-maker (mālā-kāra).—(*Bṛahmavaivarta-Purāṇa*, Brahma-khaṇḍa, Chap. X, vv. 19–21.)

(7) On the different branches of architecture, Vitruvius agrees with the *Mānasāra* (1) :

> It might be pointed out that Vitruvius deals with similar objects, in the same manner as in the *Mānasāra*. He describes the subject in three chapters :
>
> 'Of those things on which architecture depends.'

'Of the different branches of architecture.'

'Of the choice of healthy situations.'

On the first of these topics Vitruvius says that 'Architecture depends on fitness and arrangement; it also depends on proportion, uniformity, consistency and economy.'

'Fitness is the adjustment of size of the several parts to their several uses and requires due regard to the general proportions of the fabric; it arises out of dimensions. Dimension regulates the general scale of the work, so that the parts may all tell and be effective.'

'Proportion is that agreeable harmony between the several parts of a building, which is the result of a just and regular agreement of them with each other; the height to the width, this to the length, and each of these to the whole. Uniformity is the parity of the parts to one another; each corresponding to its opposite, as in the human figure. The arms, feet, hands, fingers are similar to and symmetrical with one another; so should the respective parts of a building correspond.'

'Arrangement is the disposition in their just and proper places of all the parts of the building and the pleasing effect of the same, keeping in view its appropriate character. It is divisible into three heads, which considered together, constitute design: these by the Greeks, are named ideals: they are called ichnography, arthography, and scinography. The first is the representation on a plane of the site plan of the work, drawn by rule and compasses. The second is the elevation of the front, slightly shadowed, and shewing the forms of the intended building. The last exhibits the front and a receding side properly shadowed, the lines being drawn to their proper vanishing points.' (Book I, Chap. II.)

'Architecture consists of three branches, namely, building, dialling and mechanics. Building is divided into two parts (in the *Mānasāra* buildings are divided into six classes as we have seen above). The first regulates the general plan of the walls of a city and its public buildings; the other relates to private buildings. Public buildings are for three purposes: defence, religion and the security of the public' (compare *M.*, XXXI, 1–2, under PRĀKĀRA).—(*Ibid.*, Book I, Chap. III.)

On the choice of healthy situation, that is, on the selection of site and the examination of soil, directions of Vitruvius are not so elaborate as those of the *Mānasāra* (*see* BHŪPARĪKSHĀ), and differ so far as two different climates would necessarily require.

'The choice of a healthy situation is of the first importance: it should be on high ground, neither subject to fogs nor rains: its aspects should be neither violently hot nor intensely cold, but temperate in both respects. The neighbourhood of marshy place must be avoided.'—(*Ibid.*, Book I, Chap. IV.)

VĀSTU-KARMAN (*cf.* VĀSTU-VIDYĀ)—The building-work ; the actual work of constructing temples, palaces, houses, villages, towns, forts, tanks, canals, roads, bridges, gates, drains, moats, sewers, thrones, couches, bedsteads, conveyances, ornaments and dresses, images of gods and sages.

The building-work (vāstu-karman) is distinguished from the science of building (vāstu-vidyā) :

Vatthu-vijja ghara-vatthu-arama-vatthadinam guṇa-dosa-sallakkhana vijja । Vathu-kammanti akata-vatthumhi gcha-patittha pana ।

(*Digha-nikāya*, I, pp. 9, 12.)

Cf. Śukra-nīti (IV, 3, 115, 116, 169).

See the Preface to this *Encyclopaedia.*

VĀSTU-KĪRTI—A type of pavilion, a pavilion with forty-four pillars.

(*Matsya-Purāṇa*, Chap. CCLXX, v. 10 ; *see* MAṆḌAPA.)

VĀSTU-VIDYĀ (*see* VĀSTU-KARMAN)—The science dealing with the rules of construction of all kinds of architectural and sculptural objects, the science of architecture.

According to Buddhaghosha's definition, Vāstu-vidyā is 'a science, the object of which is to ascertain whether a site selected for a building is lucky or not.'—(*Dialogues of Buddha*, Part I, p. 18.)

According to *Sukrāchārya*, *Vāstu-vidyā* or *Śilpa-śastra* is 'the science which deals with the rules for the construction of palaces, images, parks, houses, canals and other good works.'—(*Śukra-niti*, IV, 3, 115, 116).

See the Harsha stone inscrip. (v. 43, *Ep. Ind.*, Vol. II, pp. 123, 128.)

VĀHANA—Carrying, conveying, a vehicle, a conveyance, an animal for riding or draught.

The riding animals of gods (*M.*, LX, 1), their images are described (*M.*, LX, 2–46 ; LXI, 2–151 ; LXII, 2–73 ; LXIII, 2–46 ; *see* under HAṀSA, GARUḌA, VṚISHABHA, and SIṀHA.

VĀHINĪ-MUKHA—A fort, fortified city.

(*M.*, X, 40 ; *see* under NAGARA and DURGA.)

VIKAṬA—Formidable, a hall, a courtyard.

(Harsha stone inscrip., vv. 12, 33, *Ep. Ind.*, Vol. II, pp. 121, 126, notes 64, 123, 128.)

VIKALPA—A class of buildings, a kind of door, pent-roofs, a type of chamber, a kind of phallus.

A class of buildings (*M.*, XI, 104–107 ; XIX, 1–5 ; XXX, 175–177 ; XXXIV, 549-552 , *see* under ĀBHĀSA).

A type of door (*M.*, XXXIX, 28–35 ; *see* under ĀBHĀSA).

Rows of pent-roofs (*M.* XVIII, 206–220).

A kind of phallus (*M.*, LII, 49 ; *see* under ĀBHĀSA).

Karṇe śālā sabhā madhye chhandaṁ syāch chhandam eva tat ।
Tat-tad-madhyāṁśake koshṭhe yasya syāt tad vikalpakam ॥

(*Kāmikāgama*, XLV, 20 ; *see* also XLV, 7 ; L, 13 ;

A class of top-chambers (*Ibid.*, LV, 130, 123-127).

VIGRAHA—An idol, an image, a figure, a form, a shape.

(*M.*, LIV, 180, etc.)

Dakshiṇa-bhāgada-kisāleyalli purātana-vigrahagala pratishṭheyam—'set up on the colonnade to the south the ancient images.'—(*Ep. Carnat.*, Vol. IV, Chāmarajnagar Taluq, no. 86; Roman Text, p. 18, line 13 ; Transl., p. 11.)

VIJAYA—A class of storeyed buildings, a type of pavilion, a hall, a kind of throne.

A class of two-storeyed buildings (*M.*, XX, 93, 10–15 ; *see* under PRĀSĀDA).

A class of pavilions (*M.*, XXXIV, 153 ; *see* under MAṆḌAPA).

A pavilion with forty-six pillars (*Matsya-Purāṇa*, Chap. CCLXX, v. 10; *see* under MAṆḌAPA.)

A type of throne (*M.*, XLV, 6 ; *see* under SIṀHASANA).

A class of octagonal buildings :

(1) *Agni-Purāṇa* (Chap. CIV, vv. 20–21 ; *see* under PRĀSĀDA).

(2) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 21, 23, 31–32 ; *see* under PRĀSĀDA)

A type of building (*Kāmikāgama*, XLV, 50, *see* under MĀLIKĀ).

VIṬAṄKA (*see* KAPOTA-PĀLIKĀ)—A dovecot, a moulding of that shape.

'Viṭaṅka is exactly the English "fillet" in its different acceptations : it denotes more generally also gable-edge, battlement.' Kern.—(*J.R.A.S.*. N. S., Vol. VI, pp. 321, 320, note 2.)

See further references under KAPOTA and KAPOTA-PĀLIKĀ.

VITASTI (*see* under AṄGULA)—A measure, the span, the distance between the tips of the fully-stretched thumb and the little finger.

(1) Kanishṭhayā vitastis tu dvā-daśaṅgula uchyate ।

(*Brahmāṇḍa-Purāṇa*, Part I, 2nd anushaṁga-pada, Chap. VII, v. 98.)

(2) Three kinds of span (*Suprabhedāgama*, XXX, 20–23 ; *see* under AṄGULA).

VITĀNA-(KA)—A cushion, a canopy.

A canopy of pearls (Ranganath inscrip. of Sundarapandya, v. 12, *Ep. Ind.*, Vol. III, pp. 12, 15).

Cf. 'Toraṇa-vitāna—a canopy (in the shape) of an arch.'—(Cochin plates of Bhaskara Ravivarman, lines 10–11, *Ep. Ind.*, Vol. III, pp. 68, 69.)

VIDATHA—A house, a holding, an asylum, a smaller or secular assembly, a rich or royal establishment like palaces, audience hall for women, Sabhā being for men's assembly.

(*R.-V.*, X, 85, 26, 27 , *A.-V.*, VII, 38, 4, *Maitra. Sam.* IV, 7, 4, *cf. R.-V.*, II, 1, 4, 27, 12, 17, III, 38, 5, 6, V, 63, 2, VII, 66, 10, VIII, 39, 1, X, 12, 7 , *A.-V.*, I, 13, 4 , XVII, 1, 15.)

VIDYĀDHARA—A class of demi-gods, a kind of fairy.

Their images are measured according to the nine-tāla (*see* details under TĀLA-MĀNA).—(*M.*, LVIII, 6, other details : 7–14.)

VIDHĀNA—An entablature.

(*M.*, XVI, 20, 43, 203 ; *see* under PRASTARA.)

VINIYOGA-MAṆḌAPA—A refectory, a type of pavilion built in the third, fourth or fifth court of the compound of a temple, where refections or meals are prepared.

(*M.*, XXXII, 8 ; *see* under MAṆḌAPA.)

VIPULĀṄKA—A type of storeyed building, a class of six-storeyed buildings.

(*M.*, XXIV, 19 ; *see* under PRĀSĀDA.)

VIPULĀKṚITIKA—A type of storeyed building, a class of six-storeyed buildings.

(*M.*, XXIV, 52 ; *see* under PRĀSĀDA.)

VIPULA-BHOGA—A site plan of 676 square plots.

(*M.*, VII, 37-38; *see* PADA-VINYĀSA.)

VIPRA-KĀNTA—A site plan in which the whole area is divided into 729 equal squares.

(*M.*, VIII, 39–40 ; *see* under PADA-VINYĀSA.)

VIPRA-GARBHA—A site plan in which the whole area is divided into 576 equal squares.

(*M.*, VII, 33–34 ; *see* under PADA-VINYĀSA.)

VIPRA-BHAKTI—A site plan in which the whole area is divided into 841 equal squares.

(*M.*, VII, 43–44 ; *see* under PADA-VINYĀSA.)

VIMĀNA—Etymologically an object measured (from root mā) or prepared or made in various ways ; hence a well-measured conveyance, a balloon, a heavenly car, a temple, building in general, the palace of an emperor, a tower surmounting the sanctuary (garbha-gṛiha) which is made in the centre of the temple.

'A car or chariot (of the gods) sometimes serving as seat or throne, sometimes self-moving and carrying its occupants through the skies ; other descriptions make the Vimāna more like a house or palace and one kind is said to be seven storeys high ; that of Rāvaṇa was called Pushpaka-(vimāna) ; any car or vehicle ; a horse ; a palace, the palace of an emperor or supreme monarch.'

Cf. Rajato-vimānaṁ sapta-chakraṁ ratham । (*Pet. Dict.*)

(1) *Mānasāra* (Chap. XVIII, 1–422), named Vimāna :

Vimānas are buildings of one to twelve storeys and are used as residences of gods and men, i.e., the term implies both temples and residential buildings :

Taitilānāṁ dvi-jātīnāṁ varṇānāṁ vāsa-yogyakam ।
Eka-bhūmi-vimānādi ravi-bhūmy avasānakam ।

(*Ibid.*, 2, 3.)

That the term 'vimāna' implies not temples alone but buildings in general, is clear from the expression 'vimāna-veśman,' 'vimāna-sadman,' 'deva-vimāna' (god's buildings), etc., which are frequently mentioned (e.g., *M.*, XII, 214).

Further, the general features of all kinds of buildings are described in the chapter (XVIII) which is named Vimāna :

The general comparative measures of different storeys are given (*ibid.*, 12–91).

The three styles, namely, Nāgara, Drāviḍa, and Vesara are described (lines 92–113).

These styles are distinguished generally by the shapes of the stūpis (domes), which are next described (lines 114–171).

A special account of the lūpās (pent-roofs) which are apparently very characteristic features of all buildings is given (lines 171–278).

Mukha-bhadras (front porticoes or tabernacles) are also characteristic features of all buildings, large or small, and they are described in detail (279 f.).

Spires (stūpi-kīlas) are also described (lines 144–171, 354–417).

Vimānasya tu sarveshāṁ prājāpatyena mānayet ।

(*M.*, II, 55 ; *see* also III, 5–6 ; XIV, 426, etc.)

Vimāne tri-gṛihe vāpi maṇḍapādīni vāstuke ।
Grāmādīnāṁ cha sarveshāṁ mānayen māna-sūtrakam ।
(*M.*, VI, 101–102.)

Purushaṁ deva-vimānasya sthāpayet purusheshṭakam ।
(*M.*, XII, 214.)

A tower :

Tad-ūrdhve cha vimānaṁ cha vedika-vedikāntakam ।
(*M.*, XXII, 57.)

Maṇḍape dve vimānaṁ syād ekaṁ vā dvi-talaṁ tu vā ।
(*M.*, XXXIV, 221.)

(2) Kechid vadanti devānāṁ mānushāṇāṁ vimānake ।
Vistāre sapta-shaṭ-pañcha-chatus-tryṁśe'dhikaṁ tribhiḥ ॥
(*Mayamata*, Chap. xx, v. 8.)

(3) *Rāmāyaṇa*, I, 5, 16 :

Sarva-ratna-samākīrṇāṁ vimāna-gṛiha-śobhitām ।

Commentary : Vimāna-gṛihaṁ sapta bhūmi-gṛiham (a seven-storeyed building), and quotes the following from Nighaṇṭu :

Vimano'strī deva-yāne (god's conveyance) sapta-bhumau cha sadmani (seven-storeyed building).

See also the following :

II, 88, 5 : Prāsādāgra-vimāneshu valabhīshu cha sarvadā ।
(*See* further context under PRĀSĀDA).

II, 2, 16 ; II, 15, 48 ; II, 33, 3 ; II, 57, 18 ; II, 59, 12 ; II, 88, 5 ; III, 32, 4 ; IV, 50, 30 ; V, 2, 53 ; V, 4, 27 ; V, 6, 1 ; V, 10, 34 ; V, 12, 14 ; V, 12, 25 ; V, 13, 1 ; V, 53, 19 ; V, 54, 23 ; VI, 24, 10 ; VI, 39, 21 ; VI, 67, 82 ; VI, 75, 23 ; VI, 75, 40 ; VII, 101, 14.

(4) *Mahābhārata*, I, 185, 23 :

Nānā-prakāreshu vimāneshu ।

(5) Commentary quotes Medinī (N. 121) : Vimānaṁ vyoma-yāne sapta-bhūmi-gṛihe'pi chet ।

See the following *Kōshas* also :

(6) Hema-chandra (*Abhidhāna-chintāmaṇi*, 89, 190 ; 3, 417).

(7) *Halāyudha* (I, 83, etc.).

(8) *Amarakōsha* (I, 1, 1, 4, 3, 36, *Pet. Dict.*).

The essential parts :

(9) Shaḍ-varga-sahitaṁ yat tu garbha-gṛiha-samanvitam ।
Āndhārāndhāri-hārokta-khaṇḍa-harmya viśeshitam ॥
Kūṭa-śālānvitaṁ yat tu pañjaraiś cha samanvitam ।
Tilaka-kshudra-nāsī-yukta-toraṇaiś cha samanvitam ।
Brahma-dvāra-patākādyair aṅgair yuktaṁ vimānakam ॥
(*Kāmikāgama*, L, 91–93.)

A type of quadrangular building :

(10) *Agni-Purāṇa*, (Chap. CIV, vv. 14–15 ; *see* under PRĀSĀDA).

(11) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 24–25 ; *see* under PRĀSĀDA).

(12) ' There is one other peculiarity common to both Jain and Hindu architecture in the north of India that requires notice. It is the form of the towers or spires called sikras or vimānas which invariably surmount the cell in which the images are placed.' Fergusson.—(*Hist. of Ind. and East. Architecture*, p. 221.)

(13) A car of the gods (Aśoka's Rock Edicts, no. IV, *Ep. Ind.*, Vol. II, pp. 451, 467).

(14) A shrine and dome (Ranganatha inscrip. of Sundarapandya. vv. 3, 8, 10, 22, 30, *Ep. Ind.*, Vol. III. pp. 11–17).

(15) A shrine (Yenamadala inscrip. of Ganapamba, v. 17, *Ep. Ind.*, Vol. III, pp. 99, 102).

(16) ' Having perceived that the central shrine of the god of the Tiruviḍaikali (temple) . . . which formerly consisted of layers of bricks, had become old and cracked,—the lord of Miladu . . . pulled down the temple, rebuilt the central shrine and the maṇḍapa of granite, placed on the shrine fine solid pitchers (dome) of gold, built a surrounding wall and a maṇḍapa, in front, and gave a canopy of pearls.'—(Fourteen inscrip. at Tirukkovalur, no. K, lines 5–7, *Ep. Ind.*, Vol. VII, pp. 145, 146, 147.)

(17) Prāsāda-mālābhir alaṁkṛitāṁ dharāṁ vidāryyaiva samutthitām |
Vimāna-mālā-sadṛiśāni yattra gṛihāni pūrṇṇendu-karāmalāni ||

' Here, cleaving asunder the earth, there rise up houses which are decorated with successions of storeys, which are like rows of aerial chariots (and) which are as pure as the rays of the full moon.'—(Mandasor stone inscrip. of Kumaragupta, line 7, *C. I. I.*, Vol. III, F. G. I., no. 18, pp. 81, 85.)

(18) ' . . . a copy of a stone inscription which existed before the sacred vimāna (i.e. the central shrine) had been pulled down.'—(Inscrip, of Vanavidyadhara, no. 47, line 1, *H. S. I. I.*, Vol. III, p. 100.)

(19) ' Vīmarasa-nāyakkan caused to be built vimānas with all the necessary characteristics for the god and goddesses at Ponnuḍukki.'—(*Ep. Carnat.*, Vol. XII, Tumkur Taluq, no. 19 ; Transl., p. 6, para. 2.)

(20) ' The Vimāna (of the temple of Parameśvara at Gudimallam) has the so-called gaja-pṛishṭhākṛiti shape (i.e., like the back of an elephant, *see* plate *c-b*, facing page 104, *Ind. Ant.*, Vol. XL) ; but a close study of the plan and sections, given in the accompanying plate (referred to above), warrant the conclusion that the architect had distinctly in view the shape of the liṅga (phallus of Śiva) ; and hence the vimāna might better be styled a liṅgākṛiti-vimāna.'

' The gajapṛishṭhākṛiti-vimāna is found only in Śaiva temples, e.g. the Dharmeśvara temple at Manimaṅgalam, the Śaiva temples at Suman-

galam, Peṇṇagaram, Bhāra-dvājāśrama near Arcot, Tiruppulivanam Konnūr (near Madras), vaḍa Tirumullaivāyil, etc.'—(Five Bana inscrip. at Gudimallam, *Ind. Ant.*, Vol. XL, p. 104, line 6, note 2.)

(21) Nirmiśi prākāra-svarṇa-kalaśa-yukta-gopura-vimāna-sahitam ।

' Created the Chāmarājeśvara temple together with its precincts, gopura adorned with golden kalaśas, and tower.'—(*Ep. Carnat.*, Vol. IV, Chāmarājnagar Taluq, no. 86 ; Roman Text, p. 18, lines 8–9 f.; Transl., p. 11.)

(22) ' Vimāna—The tower of a shrine." Rea.—(Chalukyan Architecture, *Arch. Surv.*, New. Imp. Series, Vol. XXI, p. 40.)

VIMĀNA-CHCHHANDAKA—A class of buildings.

A type of building which is 21 cubits wide, has seven storeys and latticed windows :

(1) *Bṛihat-saṁhitā* (Chap. LVI, 22, *J.R.A.S.*, N. S., Vol. VI ; p. 319 ; *see* under PRĀSĀDA).

(2) *Matsya-Purāṇa* (Chap. CCLXIX, vv. 28, 32, 33, 47, 53 ; *see* under PRĀSĀDA).

(3) *Bhavishya-Purāṇa* (Chap. CXXX, v. 29 ; *see* under PRĀSĀDA).

VIVĀHA-MAṆḌAPA (*see* MAṆḌAPA)—A pavilion erected for the wedding ceremonies.

(*Skanda-Puṛāṇa*, Māheśvara-khaṇḍa-prathama, Chap. XXIV, vv. 1–67.)

VIVṚITA—A type of storeyed building, a class of the nine-storeyed buildings.

(*M.*, XXVII, 20–22 ; *see* under PRĀSĀDA.)

VIVEŚA—A site plan of 625 square plots.

(*M.*, VII, 35-36 ; *see* PADA-VINYĀSA.)

VIŚ—A fixed abode.

(*R.-V.*, X, 91, 2.)

VIŚĀLA-(KA)—Breadth, an architect, a type of building, a class of pavilions, a type of hall, a site plan of 529 square plots.

Compare *Mānasāra* (Chapter VII, 31-32 ; XV, 14 ; LXVIII, 13 ; *see* PADA-VINYĀSA.)

A type of rectangular building :

(1) *Agni-Purāṇa* (Chap. CIV, vv. 16–17 ; *see* under PRĀSĀDA).

(2) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 21–22, 26–27 ; *see* under PRĀSĀDA).

A pavilion with 100 columns (*Suprabhedāgama*, XXXI, 104 ; *see* under MAṆḌAPA).

A class of buildings (*Kāmikāgama*, XLV, 41 ; *see* under MĀLIKĀ).

A hall with thirty-eight pillars (*Matsya-Purāṇa*, Chap. CCLXX, v. 11 : *see* under MAṆḌAPA).

VIŚĀLĀKSHA—A site plan of 784 square plots.

(*M.*, VII, 41-42, *see* under PADA-VINYĀSA.)

VIŚVA-KĀNTA—A type of storeyed building.

A class of five-storeyed buildings (*M.*, XXXIII, 16–18; *see* under PRĀSĀDA).

A class of nine-storeyed buildings (*M.*, XXVII, 27–33; *see* under PRĀSĀDA).

VIŚVA-VIDYĀLAYA—A university, a place of learning of universal subjects in Arts and Sciences, comprising various college buildings, prayer halls, residences, etc.

The famous universities were at Taxila, Valabhi, Vikramaśilā, Odantapuri, Jagaddala, Somapuri, Vikramapuri, and Nalanda. Compare big colleges at Bodh-Gaya, Sanchi, Barhut, Śrāvasti, Kauśambī, Sarnath, Mathura, Nāsika, Amaravati, Nāgārjunikuṇḍa, Jagayyapeta, Kanchipura, Kannipattana and Madura. For structural details, *see* NALANDA.—Writer's articles on *Universities during Hindu Period* (University Studies, Allahabad, 1936, the *Twentieth Century*, July, 1935, the *Science and Culture*, December, 1935, *Modern Review*, August, 1935.)

VIŚVEŚA-SĀRA—A site plan in which the whole area is divided into 900 equal squares.

(*M.*, VII, 45–46, *see* under PADA-VINYĀSA.)

VISHĀṆA-(KA)—The horn, the tusk, the wing of a building.

Vishāṇaka-samāyukto nandanaḥ sa udāhṛitah ।

'That (prāsāda) is called nandana which is furnished with a vishāṇaka (wing).'—(*Matsya-Purāṇa*, Chap. CCLXIX, v. 33.)

VISHKAMBHA—The diameter of a circle, the length or width of an object, a post, a pillar, the prop or beam, the bolt or bar of a door.

(1) Harmya-pādasya vishkambham samam mañjūsha-vistṛitiḥ ।

'The length of the vault is equal to the width at the foot of the mansion.'—(*M.*, XII, 29.)

(2) Dvārasyārdhena vishkambhaḥ—'half of the door gives the width'.

(*Bṛihat-saṁhitā*, LIII, 24.)

Sāshṭāṁśo vishkambho dvārasya dvi-guṇa uchhrāyaḥ ।

(*Ibid.*, v. 25; *see J. R. A. S.*, N. S., Vol. VI, p. 284, note 3.)

(3) Tehsām āyāma-vishkambhāḥ sanniveśāṁtarāṇi cha ।
Kṛitrimānām cha durgāṇām vishkambhāyāmam eva cha ।
Yojanād arddha-vishkambham ashṭa-bhāgādhikāyatam ॥

(*Brahmāṇḍa-Puṛāṇa*, Part 1, 2nd anushaṁga-pāda, Chap. VII, vv. 94, 106.)

(4) Chatur-daṇḍāvakṛishṭaṁ parikhāyāḥ shaḍ-daṇḍochchhritam avaruddhaṁ tad-dvi-guṇa-vishkambhaṁ khātād vapraṁ kārayet।
Vaprasyopari prākāraṁ vishkambha-dvi-guṇotsedham।
Antareshu dvi-hasta-vishkambhaṁ pārśve chaturguṇāyāmam anuprākāraṁ ashṭa-hastāyataṁ deva-pathaṁ kārayet।

(*Kauṭilīya-Artha-śāstra*, Chap. XXIV, paras. 3, 5, 10, pp. 51–52.)

VISHṆU-KĀNTA—A class of storeyed buildings, a type of column, a type of gate-house, a kind of phallus, a jewel.

A class of four-storyed buildings (*M.*, XXII, 3–12 ; *see* under PRĀSĀDA).
A jewel (*M.*, XII, 90, etc.).
An octagonal column with eight minor pillars (*M.*, XV, 20, 245, *see* under STAMBHA).
A gate-house with sixteen towers (*M.*, XXXIII, 557 ; *see* under GOPURA).
A kind of phallus (*M.*, LII, 154 ; *see* under LIṄGA).

VISHṆU-GARBHA—(*See* under GARBHA-NYĀSA)—A kind of foundation prescribed for the Vishṇu temples.

(*M.*, XII, 141.)

VISTĀRA—Breadth, length (*see* under MĀNA).

VIHĀRA—Originally monasteries for Buddhist monks and nuns; later at the time of Nalanda University, the residential quarters for the professors (compare Saṅgārāma), a dwelling, a habitation for gods and for monks, a temple, a convent (W. Geiger, *Mahāvaṁśa*, p. 297) ; a group of apartments for a community of monks, a Saṅgārāma or monastery in Ceylon and Nepal used to designate ' not only a cell but also any monastic establishment (Fergusson, *Ind. and East. Arch.*, 1910, I, p. 170). A Buddhist monastery, a convent, a temple. With the Buddhists and Jains was ' a hall where the monks met and walked about ; afterwards these halls came to be used as temples and sometimes became the centres of monastic establishments.'

(1) Prāg-Gaṅgeśvara-sannidhau . . . chakre-dārumayaṁ vihāram amalaṁ Śrī-Lokanāthāspadam।

' Made a spotless vihāra of wood, an abode for the Lord of the World, in the vicinity of the Gaṅgeśvara (temple).'—(Arigom Sarada inscrip., v. 2, *Ep. Ind.*, Vol. IX, p. 302.)

(2) Vihāro nava-khaṇḍa-maṇḍala-mahī-hāraḥ kṛito'yaṁ tayā tāriṇyā vasudhārayā nanu vapur vibhraṇyālaṁkṛitah।

Yaṁ dṛishṭvā pratichitra-śilpa-rachanā-chāturyya-sīmāśrayaṁ gīrvāṇaiḥ
sudṛiśaṁ cha vismayam agād viśvakarmāpi saḥ ||

'This vihāra, an ornament to the earth, the round of which consists of nine segments, was made by her, and decorated as it were by Vasudhārā herself in the shape of Tāriṇī, and even the Creator himself was taken with wonder when he saw it accomplished with the highest skill in the applying of wonderful arts and looking handsome (with the images of) gods.'

(Sarnath inscrip. of Kumaradevi, v. 21, *Ep. Ind.*, Vol. IX, pp. 325, 327.)

(3) 'Throughout this work the term vihāra is applied only to monasteries, the abodes of monks or hermits. It was not, however, used in that restricted sense only, in former times, though it has been so by all modern writers. Hiouen Thsang, for instance, calls the great tower at Buddh-Gaya a vihāra, and describes similar towers at Nalanda, 200 and 300 feet high, as vihāras. The Mahawanso also applies the term indiscriminately to temples of a certain class, and to residences. My *impression* is that all buildings designed in storeys were called vihāras (?), whether used for the abode of priests or to enshrine relics or images. The name was used to distinguish them from stupas or towers, which were relic shrines, or erected as memorials of places or events, and never were residences or simulated to be such, or contained images, till the last gasp of the style, as at Kholvi At present this is only a theory.'

(This is a false *impression*; it is not substantiated by literary or archaeological evidences.)

Like the chaityas, 'these (vihāras or monasteries) resemble very closely corresponding institutions among Christians. In the earlier ages they accompanied, but were detached from the chaityas or churches. In later times they were furnished with chapels and altars in which the service could be performed independently of the chaitya halls, which may or may not be found in their proximity.' Fergusson.—(*Hist. of Ind. and East. Arch.*, pp. 130, note 1, 51.)

For the photographic views and architectural details of the existing vihāras, *see* Fergusson :

Diagram explanatory of the arrangement of a Buddhsit vihāra of four storeys in height (p. 134, fig. 67, 66).

Ajunta-Vihāras (p. 154–155, fig. 83, 84, 85).

Plan of the great Vihāra at Bagh (p. 160, fig. 87).

Plan of Dehrwarra at Ellora (p. 163, fig. 88).

Plan of Monastery at Jamalgiri (p. 171, fig. 92).

Plan of Monastery at Takht-i-Bahi (p. 171, fig. 93).

Plan of Ionic Monastery at Sha Dehri (p. 176, fig. 96).

(4) *See* Buddhist Cave Temples (*Arch. Surv.*, New Imp. Series, Vol. IV, Plate XXVII).

VIHṚITA—An architectural ornament, a moulding, a moulding of the upper part of a column.

(*M.*, XV, 78 ; *see* the list of mouldings under STAMBHA.)

VĪṆĀ—A flute, a lute, a carving on the chariot.

(*M.*, XLIII, 163, etc.)

VĪTHI(-Ī)—A road, a way, a street, a market place, a stall, a shop, a terrace.

Madhya-rathyāvṛitā vīthī samam evaṁ vidhīyate ।
Mukhyā vīthī dvi-pakshā syād gṛiha-tāraṁ tri-daṇḍakam ।
Evaṁ bāhya-vīthī syād antar-vīthir ihochyate ।
Paksha-yuktā tu vīthī syāt paksha hinaṁ tu mārgakam ।
Tri-chatush-pañcha-daṇḍaṁ vā vīthīnāṁ vistṛitir bhavet ।
Shaṭ-saptāshṭa-daṇḍaṁ vā nanda-paṅktīśa-bhānuṁ vā ।
Evaṁ tu svastika-vīthī lāṅgalākāravad bhavet ।
Antar-vīthī chaika-pakshā bāhya-vīthī dvi-pakshakā ।
Paritas tu mahā-vīthir vither eshā dvi-pakshayuk ।
Vīthīnāṁ pārśvayor deśe vīthikādyair alaṅkṛitam ।

(*M.*, IX, 101, 104, 191, 196, 199, 200, 338, 396, 477, 529 ; *see* also 99, 136, 184–187, 197, 201, 203, 206, 324, 339, 345, 347, 352, 426, 431, 463, 519.)

Pāda-daṇḍaṁ samārabhya pāda-pāda-vivardhitam ।
Syād ekā-daśa-daṇḍāntaṁ vīthi-mānam ihāgame ॥
Mārga-māṇaṁ tu tāvat syān na dvāraṁ vīthikāgrake ।

(*Kāmikāgama*, XXV, 4, 5.)

VĪTHIKĀ—A gallery, a picture gallery, a road, a narrow street, a lane.

(1) Śālāto yas tṛitīyāṁśas tena kāryā tu vīthikā ।

(*Kiraṇākhya-Tantra* ; *see Bṛihat-saṁhitā* below.)

(2) Śālā-tri-bhāga-tulyā cha kartavyā vīthikā bahiḥ ।

(Viśvaka ; *see Bṛihat-saṁhitā*, below.)

(3) Śālā-tri-bhāga-tulyā kartavyā vīthikā bahir-bhavanāt ।

'Outside the dwelling one should make a gallery, being in width a third part of the hall.'—(*Bṛihat-saṁhita*, LIII, 20, *J.R.A.S.*, N. S., Vol. VI, p. 283, note 2.)

(4) Asmāt tu chatū-rathyāgrād āvṛitā vīthikā tataḥ ।
Tat-paiśācha-pade deśe vāvṛitā vīthikā bhavet ।

Antaś-chatush-padaṁ madhye vīthikāgraṁ chatur-diśi ।
Vīthīnāṁ pārśvayor deśe vīthikādyair alaṅkṛitam ।

(*M.*, IX, 337, 434, 478, 529 ; *see* also 323, 334–336.)

VĪRA-KAṆṬHA (*see* VĪRA-GALA)—A warrior's neck, a part of the column, a monument.

(*Suprabhedāgama*, XXXI, 59 ; *see* under STAMBHA.)

VĪRA-KARṆA—A warrior's ear, a part of the column, a monument.

(*M.*, XV, 49, 81, 142.)

VĪRA-KĀṆḌA—An upper part of the column.

Tri-bhāgo maulikotsedhaḥ vīra-kāṇḍād upary-adhaḥ ॥
Vīra-kāṇḍāvadhi kshepya tad-ūrdhve nakra-paṭṭikā ॥

(*Kāmikāgama*, LV, 62, 111.)

VĪRA-GALA (*see* BIRA-GALA)—A warrior's neck, a monument, a memorial.

A monumental stone (*Ind. Ant.*, Vol. IX, p. 96, c. 2, line 10).

A stone erected in memory of a fallen warrior (Chalukyan Architecture, *Arch. Surv.*, New. Imp. Series, Vol. XXI, p. 40).

VĪRA-PAṬṬA—The front plate, the diadem, of heroes forming part of a crown.

(1) ' (These pearls) were strung on two strings (vaḍam) on both sides of the front plate (vīra-paṭṭa), literally the diadem of heroes, " this ornament forms part of a crown," Vol. II, p. 242, note 1.)'—(Inscrip. of Rajendra Chola, no. 8, para. 25, *H. S. I. I.*, Vol. II, p. 90.)

(2) ' Given to the image of Ardha-nārīśvara) one front plate (vīra-paṭṭa), weighing,—inclusive of sixteen neruñji (a kind of thistle), flowers made of gold,—four karanju and three mañjādi, and worth three kāśu.'

' On (it) were strung one hundred and eleven pearls, viz., old pearls, round pearls, roundish pearls, polished pearls, small pearls, ambumudut crude pearls, śappatti and śakkattu.'—(Inscrip. of Rājraja, no. 39, para. 9, *H.S.I.I.*, Vol. II, p. 166.)

(3) ' One front plate (vīra-paṭṭa), laid (round the head of the image of Kshetrapāla and consisting of) seven mañjādi of gold.'—(Inscrip. of Rājendra Chola, no. 43, para. 5, *H. S. I. I.*, Vol. II, p. 173.)

(4) ' One diadem (vīra-paṭṭa), made for the lord of the Śri-Rāja-rājeśvara temple . . . '—(Inscrip. of Rājraja, no. 59, para. 22, *H. S. I. I.* Vol. II, p. 242.)

VĪRA-ŚĀSANA (*see* BĪRA-GALA and VĪRA-GALA)—A monument, a memorial.

VĪRĀSANA—A throne, a type of pavilion.

A kind of coronation throne (*M.*, XLV, 41 ; *see* under SIṂHĀSANA).

A pavilion with twenty columns (*Suprabhedāgama*, XXXI, 102 ; *see* under MAṆḌAPA).

VṚITA(-TTA)—A circular object, a kind of mound column, a type of building, a class of pavilions.

Dvā-triṁśatā tu madhye pralinako vṛitta iti vṛittaḥ ।

(*Bṛihat-saṁhitā*, LIII, 28 ; *see* under STAMBHA.)

A type of building which is circular in shape, has one storey and one cupola. According to Kern's interpretation it is dark in the interior (añjanarūpa, Varāha-mihira ; sandhyākāra, Kāśyapa) :

(1) *Bṛihat-saṁhitā* (Chap. LVI, 28, *J. R. A. S.*, N. S., Vol. VI, p. 320, note 1, *see* under PRĀSĀDA.)

(2) *Matsya-Purāṇa* (Chap. CCLXIX, vv. 29, 49, 53 ; *see* under PRĀSĀDA.)

(3) *Bhavishya-Purāṇa* (Chap. CXXX, v. 30, *see* under PRĀSĀDA.)

A type of pavilion (maṇḍapa) :

(4) *Suprabhedāgama* (Chap. XXX, 100, 102 where it is called Jaya-bhadra ; *see* under JAYA-BHADRA).

(5) *Cf.* ' Within this and rising from a ledging of cut stone 4 feet high and 3 broad, stand the walls of the temple, a perfect circle about 20 feet high and 2 thick, with a handsome cornice of brick encircling the top. The whole appears to have been coated with five pilaster small parts of which still adhere. I examined closely but could not discover the smallest appearance of its ever having had a roof.' Lieut. Fagan.—(An Account of the Ruins of Topary, *Ceylon Govt. Gazette*, Aug., 1. 1820, *Ind. Ant.*, Vol. XXXVIII, p. 110, c. 1, para 1, line 24.)

VṚIDDHA—A finial, a spire, the top-part of a building.

(*M.*, XVII, 126 ; *see* under ŚIKHĀ.)

VṚISHA-(BHA)—The bull, the riding animal of a god, a type of building.

The riding animal of Śiva, description of his image (*M.*, LXII, 2-7) *see* under VĀHANA.)

A type of building which has one storey, one turret (śṛiṅga), is round everywhere and twelve cubits wide :

(1) *Bṛihat-saṁhitā* (Chap. LVI, 26, *J. R. A. S.*, N. S., Vol. VI, p. 319 ; *see* under PRĀSĀDA).

(2) *Matsya-Purāṇa* (Chap. CCLXIX, vv. 30, 36, 44, 45, 53 ; *see* under PRĀSĀDA).

(3) *Bhavishya-Purāṇa* (Chap. CXXX, v. 33 ; *see* under PRĀSĀDA).

A type of oval building :

(1) *Agni-Purāṇa* (Chap. CIV, vv. 19–20 ; *see* under PRĀSĀDA.)

(2) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 29–30 ; *see* under PRĀSĀDA.)

VṚISHABHĀLAYA—A detached building near the gate of a temple where the bull (nandin) is installed.

Prākāra-dvāra-sarveshāṁ kalpayed vṛishabhālayam ।
Vṛishabhasyopari-bhāge tu kalpayed bali-pīṭhakam ।

(*M.*, XXXII, 98–99.)

VṚISHA-MAṆḌAPA—A pavilion where the nandin or bull is installed.

Suprābhedāgama (XXXI, 96, 98 ; *see* under MAṆḌAPA) and compare :

Vṛishasya maṇḍapaṁ tatra chatur-dvāra-samāyutam ।

(*Ibid.*, XXXI, 133.

VETRA—The cane, a stick, an architectural ornament, a moulding.

A moulding of the diadem (makuṭa) (*M.*, XLIX, 99–100).

A moulding of the bedstead (*M.*, XLIV, 41.)

An ornament of the throne (*M.*, XLV, 162, 188 ; *see also M.*, VII, 241.)

VEDI-(KĀ)—Originally a hall for reading the Vedas in, an altar, a stand, a basis, a pedestal, a bench, a kind of covered verandah or balcony in a courtyard, a moulding, ‘ bands or string-courses carved with rail-pattern.’ The platform of a stage (Bharata’s *Nāṭya-śāstra* II, 102, *see* details under NĀṬYA-GṚIHA(VISMA), terrace, altar, rail, terrace with balustrade (*Dipavaṁśa* II, p. 181–183, Oldenburg). Compare *Pāshāṇavedi* and *Silāvedi* (*Mahāvaṁśa*, 36, 52, 103), *Muddha-vedi* and *Pāda-vedi* (*ibid.*, 35, 2.) (W. Geiger, *Mahāvaṁśa*, pp. 296–297.)

(1) Sālāntaṁ vedikordhve tu yuddhārthaṁ kalpayet sudhīḥ ।

(*M.*, IX, 36½.)

A moulding of the column :

Grīva-tuṅgaṁ tridhā bhajyaṁ ekāṁśe vedikonnatam ।

(*M.*, XV, 105.)

‘ The quadrangular spot in the courtyard of a temple or palace (Apte). That portion of a building which is covered by the walls (*M.*, XIX, 25).

Ūrdhve pādodaye bandhaṁ bhāgam ekāṁśa-vedikam ।

(*M.*, XIX, 99.)

The portion above the neck-part of a building (*M.*, XXII, 50, 54, 57, etc.).

The altar or dais (*M.*, LXX, 29, 35, etc.).

Kuryāt sarvaṁ vedikāṁ bhadra-yuktam ।

(*M.*, XIX, 180.)

(2) Tri-chūlī vaiśya-śūdrāṇāṁ pañcha-sapta mahī-bhṛitām ।
Brāhmaṇānāṁ tathaiva syur ekādaśa tu vedikāḥ ॥

It should be noticed that 'vedikā' and 'chūlī' refer to the same object.—(*Kāmikāgama*, xxxv, 60.)

The basement :

Prāsāda-bhūshaṇaṁ vakshye śrūyatāṁ dvija-sattamāḥ ।
Syāt pāda-prastaraṁ grīvā varge mūle tu vedikā ॥

(*Ibid*, LV, 1.)

(3) Vedikeyaṁ tu sāmānyā kuṭṭimānāṁ prakīrtitā ।
Pratikramasya chotsedhe chatur-viṁśati bhājite ॥
Vedikā-prastara-samaṁ shaḍ-aṁśīkṛitya bhāgaśaḥ ।
Ekāṁśaṁ prati-paṭṭaṁ syād aṁśābhyām antarībhavet ॥

(*Vāstu-vidyā*, ed. Śāstri, IX, 19, 23.)

(4) Kāñchanair bahubhiḥ stambhair vedikābhiś cha śobhitaḥ ।

(*Rāmāyaṇa*, VI, 3, 18, etc.)

(5) (Nalinīm) . . . mahā-maṇi-śilā-paṭṭa-baddha-paryanta-vedikām ।

(*Mahābhārata*, II, 3, 32, etc.)

(6) Athātaḥ saṁpravakshyāmi pratishṭhā-vidhim uttamam ।
Kuṇḍa-maṇḍapa-vedīnāṁ pramāṇaṁ cha yathā-kramam ॥
Prāsādasyottare vāpi pūrve vā maṇḍapo bhavet ।
Hastān shoḍaśa kurvīta daśa dvā-daśa vā punaḥ ॥
Madhye-vedikayā yuktaḥ parikshiptaḥ samantataḥ ।
Pañcha-saptāpi chaturaḥ karān kurvīta vedikām ॥

(*Matsya-Purāṇa*, Chap. CCLXIV, vv. 1, 13, 14 ;
see also Chap. CCLXIX, vv. 13, 18.)

From the position and measures given here to the vedi or vedikā, it appears to imply some platform other than the pedestal or throne of the idol.

(7) Tad-ūrdhvaṁ tu bhaved vedī sakaṇṭhā mānasārakam ॥
Urddhvaṁ cha vedikā-mānāt kalaśaṁ parikalpayet ॥

(*Agni-Purāṇa*, Chap. XLII, vv. 17, 18.)

(8) Maṇḍapaṁ cha su-vistīrṇaṁ vedikābhir manoramam ॥
Tan-madhye maṇḍapam kṛitvā vediṁ tatra su-nirmalām ॥

(*Skanda-Purāṇa*, Māheśvara-khaṇḍa-prathama, Chap. XXIV, v. 2, *Vaishṇava-khaṇḍa-dvitīya*, Chap. XXV, v. 26.)

(9) *See* specimens of Jaina sculptures from Mathura (Plate III, *Ep. Ind.*, Vol. II, p. 319, last para.).

(10) Hathī cha puvādo hathinaṁ cha uparimā hethimā cha veyikā—'the elephants and, before the elephants, the rail-mouldings above and below.'—(Karle inscrip. nos. 3, 17, 18, *Ep. Ind.*, Vol. VII, pp. 51, 63-64.)

(11) Chānyāny ābhānti dīrggha-valabhiṁ sa-vedikām।

'And other long buildings on the roofs of the houses, with arbours in them, are beautiful.'—(Mandasor stone inscrip. of Kumaragupta, lines 6–7, *C. I. I.*, Vol. III, F. G. I., no. 18, pp. 81, 85.)

(12) Eshā bhāti kulāchalaiḥ parivṛitā prāleya-saṁsarggibhir vvedī
meru-śileva kāñchana-mayī devasya viśrāma-bhūḥ।
Śubhraiḥ prānta-vikāsi-paṅkaja-dalair ity-ākalayya svayaṁ rau-
pyaṁ padmam achīkarat paśupateḥ pūjārtham aty-ujjvalam॥

'Thinking that this throne on which the deity rests, golden-like mouns meru, was surrounded by the imperishable (seven) primeval mountains covered by snow, (the king) himself caused an exceedingly resplendent silver lotus with brilliant wide opened petals to be made for the worship of Paśupati.'

'(The poet tries to prove that the lotus resembles the shrine of Paśupati. As the latter is of gold, so the centre also of the lotus is golden, and as the temple is surrounded by snowy mountains, so the petals of the lotus are made of silver).'—(Inscrip. from Nepal, no. 15, of Yaya-deva, v. 25, *Ind. Ant.*, Vol. IX, pp. 179, 182).

(13) 'Vedi (bedi)—Hall for reading the Vedas in.'—(Vincent-Smith, Gloss. to General Cunningham's *Arch. Surv. Reports.*)

(14) *See* Cunningham, *Arch. Surv. Reports* (Vol. XVII, Plate XXXI, Buddhist railings).

(15) 'Veyikā, which, as well as Vedikā and vetikā in other Buddhist inscriptions, stands for Sanskrit vedikā, does not mean altar, dais, etc., but hands or string-courses carved with rail-pattern : compare *Mahāvaṁśa*, 228.' Dr. Burgess.—(Karle inscrip. no. 3, *Arch. Surv.*, New Imp. Series, Vol. IV, p. 90, note 3 ; *see* also nos. 15, 16 : Kshatrapa inscrip. no. 3.)

(16) 'These (rails, ? vedi) have recently been discovered to be one of the most important features of Buddhist architecture. Generally they are found surrounding topes, but they are also represented as enclosing sacred trees, temples and pillars, and other objects.' Fergusson.—(*Hist. of Ind. and East. Arch.*, p. 50.)

See the photographic views and architectural details of the following Rails in Fergusson :

Buddh Gaya Rail (p. 86, figs. 25, 26).
Rail at Bharhut (p. 88, fig. 27).
Rail at Sānchi (p. 92–93, figs. 29, 30, 31).
Rail in Gautamiputra Cave (p. 94, fig. 32).

VEDIKĀ-VĀTAPĀNA—A balustrade.

(*S. B. E.*, xx, p. 104, 4, 3 ; p. 162, 4, 4 ; W. Geiger, *Mahāvaṁśa*, p. 297.)

VEDI-KĀNTA-(KA)—A type of storeyed building, a class of four-storeyed buildings.

(*M.*, xxii, 58–59 ; *see* under Prāsāda.)

VEDI-BANDHA—The pedestal, the base, the basement.

Prāsādau nirgatau kāryau kapotau garbha-mānataḥ ।
Ūrdhvaṁ bhitty-uchchhrāyāt tasya mañjarīṁ tu prakalpayet ॥
Mañjaryāś chārdha-bhāgena śuka-nāsaṁ prakalpayet ।
Ūrdhvaṁ tathārdha-bhāgena vedi-bandho bhaved iha ॥

(Viśvak 6, 767, *J. R. A. S.*, N. S., Vol. vi, pp. 421, 320, note 2.)

These lines are identical in the *Matsya-Purāṇa* (Chap. cclxix, vv. 11–13.)

VEDI-BHADRA—One of the three classes of pedestals, the other two being Prati-bhadra and Mañcha-bhadra. It has four types differing from one another in the addition or omission of some mouldings and in height.

(*M.*, xiii, 27–53 ; *see* the list of mouldings under Upapīṭha.)

VEŚANA—An entrance, a gate, a gateway, a band, an architectural moulding.

Eka-dvi-tri-daṇḍaṁ vā chāntarālasya veśanaṁ syāt ।
Harmya-vaśād upa-veśanaṁ yuktam ।

(*M.*, xix, 191, 187.)

A band in connexion with joinery (*M.*, xvii, 139).

Cf. Ūrdhva-kūṭa-veśanam ।

(*M.*, xx, 72.)

. . . bhitti-vistāram eva cha ।
Śeshaṁ tad-garbha-gehaṁ tu madhya-bhāge tu veśanam ।

. (*M.*, xxxiii, 333–334 ; *see* also 488.)

In connexion with chariots : Kukshasya veśanam ।

(*M.*, xliii, 14)

In connexion with the phallus :

Liṅga-tuṅga-viśeshaṁ syād veśanaṁ tan nayet budhaḥ ।

(*M.*, lii, 313.)

VEŚMAN—A ' house as the place where one is settled. '

(*R.-V.*, x, 107, 10 ; 146, 3 ; *A.-V.*, v, 17, 13 ; ix, 6, 30 ; *Ait. Bra.* viii, 24, 6.)

VESARA—A style of architecture, once prevailing in the ancient Vesara or Telugu country, ' India between the Vindhyas and the Krishna corresponding to Tamil India ' (S. K. Aiyangar, *J.I.S.O.A.*, Vol. II, no. 1, p. 23–27.)

(*See* details under NĀGARA.)

VAIJAYANTIKA—A type of building, a class of single-storeyed buildings.

(*M.*, XIX, 166 ; *see* under PRĀSĀDA.)

VAIRĀJA—A class of buildings, square in plan and named as follows : (1) Meru, (2) Mandara, (3) Vimāna, (4) Bhadra, (5) Sarvato-bhadra, (6) Ruchaka, (7) Nandika, (8) Nandi-varddhana and (9) Śrīvatsa.

(1) *Agni-Purāṇa* (Chap. CIV, vv. 11, 14–15 ; *see* under PRĀSĀDA).

(2) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 21–22, 24–25 ; *see* under PRĀSĀDA)

VAIŚYA-GARBHA (*see* GARBHA-NYĀSA)—A kind of foundation prescribed for the buildings of the Vaiśyas.

(*M.*, XII, 162; *see* under GARBHA-NYĀSA.)

VYAJANA—A fan, an account of its architectural details.

(*M.*, L, 46, 97–110 ; *see* BHŪSHAṆA.)

VYAYA—One of the six Varga-formulas, an architectural measure, the name of a year.

(*See* details under SHAḌ-VARGA.)

(1) Śrīmach-chhāli-śakābdake cha galite nāgābhra-bāṇeṁdubhiś chābde
sad-vyaya-nāmni-chaitra-sita-shashṭhyāṁ saumya-vāre vṛishe ।

' And in the excellent year named Vyaya . . . '

(Karkala inscrip. of Bhairava II, v. 6, line 7, *Ep. Ind.*, Vol. VIII, pp. 131, 134, 124.)

Śāli-vāhana-śaka-varsha (1508) neyā vyaya-saṁvatsarada) ।

' In the Śālivāhana saka year which corresponded to the Vyaya saṁvatsara . . . '—(*Ibid.*, line 9.)

(2) ' When the year of glorious era called Śāliśaka, having the excellent name of Vyaya and to be expressed in words by the elephants, the sky, the arrows, and the moon, had expired . . . '

' The month Chaitra of the Vyaya saṁvatsara, which was the year of the Śrī-Śālivāhana Śaka 1508.'—(Śāsana of the Jaina Temple at Karkala, *Ind. Ant.*, Vol. V, p. 43, c. 1, lines, 23, 32.)

VYĀGHRA-NĪḌA—The cage for a domesticated tiger, included in the articles of furniture.

(*M.*, L, 55, 251–269 ; *see* under BHŪSHAṆA.)

VYĀLA-TORAṆA (*see* TORAṆA)—An arch marked with the leograph.

Tataḥ samabhyunnata-pūrvva-kāyas tenādhirūḍhaḥ sa narādhipena ।
Samutpatann uttama-sattva-vegaḥ khe toraṇa-vyāla(ka)-vaddha bhāse ॥

(*Jātakamālā, Sarabha-jātaka*, XXV, 22; v. 19, ed. Kern, p. 165.)

Ś

ŚAKTI—Power, energy, capacity, strength, female divinity, the female deities in general.

Mānasāra (Chap. LIV, 1–195), named Śakti :

Sarasvatī or goddess of learning, Lakshmī or goddess of wealth and fortune, Mahī or the earth goddess, Manonmanī (Manaḥ-unmādinī) or goddess of love, Sapta-mātṛī or the seven goddesses collectively so called, and Durgā are the different phases of Śakti (lines 2–4).

Of these, Lakśmī is distinguished into Mahā or the great Lakshmī and Sāmānyā or the ordinary Lakshmī, the latter being installed in all family chapels (lines 63–64). The seven goddesses consist of Vārāhī, Kaumārī, Chāmuṇḍī, Bhairavī, Māhendrī, Vaishṇavī, and Brahmāṇī (lines 126–127).

These seven goddesses are measured in the nine-tāla system (line 128) ; all other female deities are measured in the ten-tāla system (lines 34–38). Details of these measures will be found under TĀLA-MĀNA.

The sculptural details include the measures of the limbs, and the poses , and the ornaments and features of each of these female deities are described in detail (lines 4–128, 132–195).

Cf. Mātṛi-gaṇaḥ kartavyaḥ sva-nāma-devānurūpākṛita-chihnaḥ ।

(*Bṛihat-saṁhitā*, LVIII, 56.)

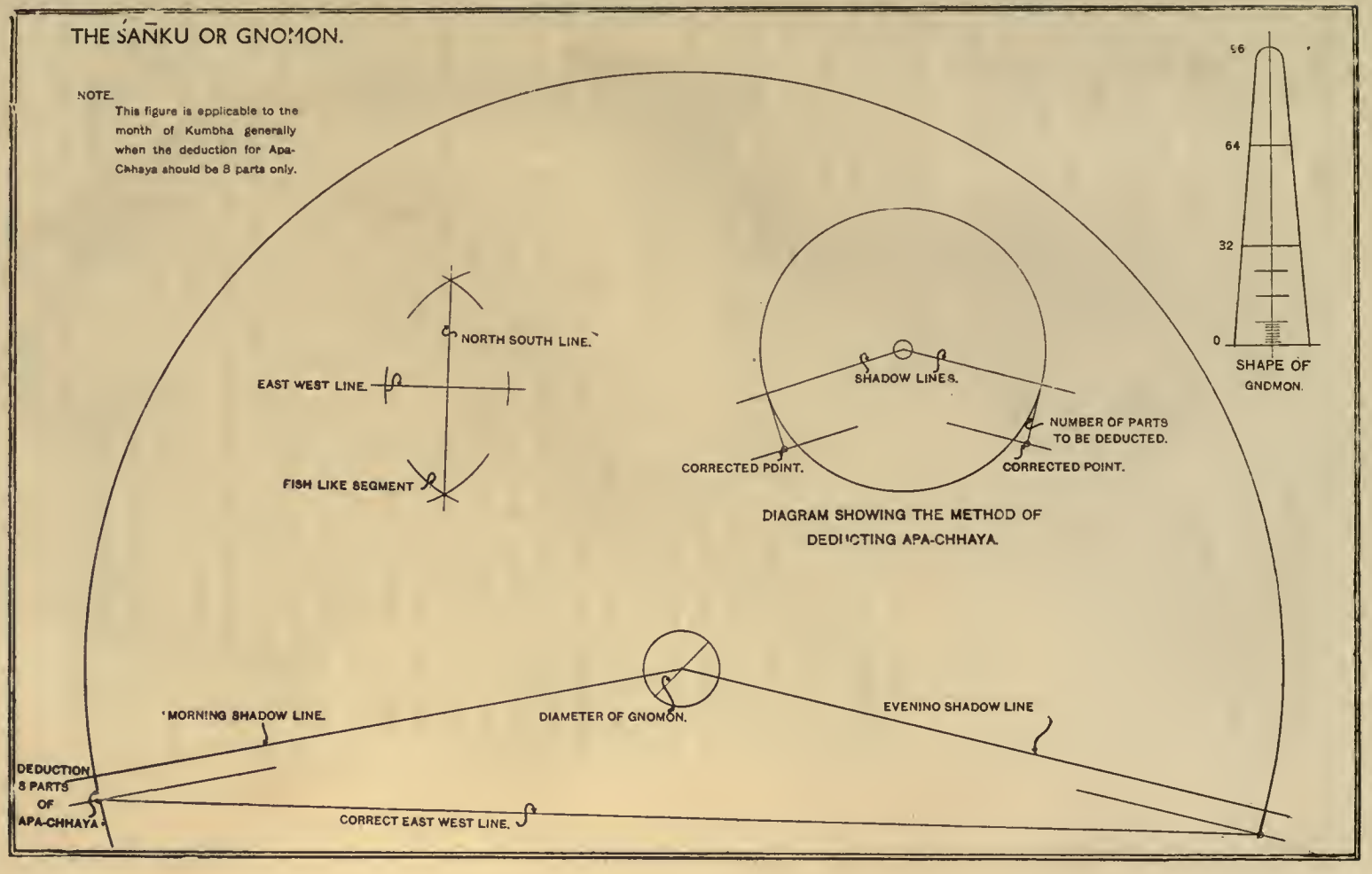
ŚAKTI-DHVAJA—A moulding of the column.

(*M.* XV, 77 ; *see* lists of mouldings under STAMBHA.)

ŚAṄKU—A stake, a peg, a post, a pole, a measuring rod, the gnomon by means of which the cardinal points are ascertained for the orientation of buildings (*see* details under DVĀRA).

See THŪṆA :

The memorial pillar set up at the four corners of śmaśāna (grave and cemetery) (*Śat. Brā.*, XIII, 8, 4, 1 ; IV, 2, 5, 15 ; *Kāt. Śrāuta Sūtra*, XXI, 3, 31) upon which Yama makes seats for the departed (*R-V.*, X, 18, 3 ; *A.-V.*, XVIII, 3, 52).


THE ŚAṄKU OR GNOMON.
NOTE.
This figure is applicable to the month of Kumbha generally when the deduction for Apa-Chhaya should be 8 parts only.
NORTH SOUTH LINE.
EAST WEST LINE.
FISH LIKE SEGMENT
SHADOW LINES.
NUMBER OF PARTS TO BE DEDUCTED.
CORRECTED POINT.
CORRECTED POINT.
DIAGRAM SHOWING THE METHOD OF DEDUCTING APA-CHHAYA.
96
64
32
0
SHAPE OF GNOMON.
MORNING SHADOW LINE.
DIAMETER OF GNOMON.
EVENING SHADOW LINE
DEDUCTION 8 PARTS OF APA-CHHAYA
CORRECT EAST WEST LINE.

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(1) *Mānasāra* (Chap. VI, 1–120, named Śaṅku) :

Rules are laid down on the principles of dialling and for ascertaining the cardinal points by means of a gnomon. The gnomon is made of some particular wood (lines 10–12, 106–108). It may be 24, 18, or 12 aṅgulas in length and the width at the base should be respectively 6, 5, and 4 aṅgulas (lines 13–22). It tapers from bottom towards the top (line 14). The rules are described (lines 23–88) ; but they are more explicit in the quotations given below. As regards the principles of dialling, each of the twelve months is divided into groups of ten days each, and the increase and decrease of shadow (or days, as stated by Vitruvius, *see* below) are calculated in these several parts of the different months.

Pegs (khāta-śaṅku) are stated to be posted in the foundations (lines 110–118).

(2) *Sūrya-siddhānta* (Chap. III, vv. 1–51, 2, 3, 4) :

Construction of the dial and description of its parts (vv. 1–6) ; the measure of amplitude (v. 7), of the gnomon, hypotenuse and shadow, any two being given to find out the third (v. 8) ; precession of the equinoxes (vv. 9–12) ; the equinoctial shadow (vv. 12–13) ; to find, from the equinoctial shadow the latitude and co-latitude (vv. 13–14) ; the sun's declination being known, to find from a given shadow at noon, his zenith-distance, the latitude, and its sine and cosine (vv. 14–17) ; latitude being given to find the equinoctial shadow (v. 17) ; to find, from the latitude and the sun's zenith, distance at noon, his declination, and his true and mean longitude (vv. 17–30) ; latitude and declination being given, to find the noon-shadow and hypotenuse (vv. 21–22) ; from the sun's declination and the equinoctial shadow to find the measure of the amplitude (vv. 22–23) ; to find from the equinoctial shadow and the measure of amplitude at any given time the base of the shadow (vv. 23–25) ; to find the hypotenuse of the shadow when the sun is upon the prime-vertical (vv. 25–27) ; the sun's declination and the latitude being given, to find the sine and the measure of amplitude (vv. 27–28) ; to find the sine of the altitude and zenith-distance of the sun, when upon the south-east and south-west vertical circles (vv. 28–33) ; to find the corresponding shadow and hypotenuse (vv. 33–34) ; the sun's ascensional difference and the hour-angle being given, to find the sines of his altitude and zenith-distance, and the corresponding shadow and hypotenuse (vv. 34–36) ; to find, by a contrary process, from the shadow of the given time, the sun's altitude and zenith-distance and the hour-angle (vv. 37–39) ; the latitude and the sun's amplitude being known to find his declination and true longitude (vv. 40–41) ; to draw the path described by the extremity of

the shadow (vv. 41–42) ; to find arcs of the right and oblique ascension corresponding to the several signs of the ecliptic (vv. 42–45) ; the sun's longitude and the time being known, to find the point of the ecliptic which is upon the horizon (vv. 46–48) ; the sun's longitude and the hour-angle being known to find the point of the ecliptic which is upon the meridian (v. 49) ; and the determination of time by means of these data (vv. 50–51).'

'On the surface of a stone levelled with water or on the levelled floor of the chunam work, describe a circle with a radius of a certain number of digits. Place the vertical gnomon of 12 digits as its centre and mark the two points where the shadow (of the gnomon) before and after noon meets the circumference of the circle ; these two points are called the east and the west points (respectively) . Then draw a line through the timi (fish) formed between the (said) east and west points and it will be the north and south line or the meridian line.'

(To draw a line perpendicular to and bisecting the line joining two given points, it is usual to describe two arcs from the two given points as centres with a common radius, intersecting each other in two points ; the line passing through the intersecting points is the line required. In this construction the space contained by the intersecting arcs is called 'Timi', a fish, on account of its form).

'And thus, draw a line through the timi formed between the north and the south points of the meridian line ; this line would be the east and west line.'

'In the same manner, determine the intermediate directions through the timis formed between the points of the determined directions (east, south, etc.).'

(3) The *Siddhānta-śiromaṇi* (Chap. VII, vv. 36–39) refers to the 'rules for resolving the questions on directions' by means of a gnomon. But it does not apparently deal with the cardinal points we are discussing here.

(4) The *Līlāvatī* (XI 1–10, part 2, Chap. II, section 4) lays down a few rules for ascertaining the shadow of the gnomon of 12 digits as well as the height of the lamp by which the shadow is caused in this case instead of by the sun. But it has no specific reference to the cardinal points.

(5) *See* Rām Rāz (*Ess. Arch. of Hind.*, pp. 19–20).

(6) Rev. Kearns gives some extracts from Myen (Maya) (*Ind. Ant.*, Vol. v, p. 231) :

Rule I—

'Stand with the sun to your right, join your hands horizontally—reject the thumbs—erect the index-finger from the middle. If the shadow of the erect finger extends to the outer edge of the finger next

adjacent—to the index-finger of the left hand—it denotes 48 minutes past sunrise, and so on.'

When the sun has passed the meridian, the position must be altered accordingly.

Rule II—

'Take a straw eleven fingers in length, place it on the ground, bend it, raising one part to serve as a gnomon, the gnomon being erected against the sun, east or west of the meridian. The height of the gnomon is found by raising the end of the bent portion no higher than suffices exactly to throw its shadow to the extreme point of the recumbent portion of the remainder of the straw. The gnomon so found gives the time of day. Ascertain how many fingers it contains; the sum is the time in Indian hours.'

(7) The details given above may be compared for further knowledge of the subject with those quoted below from *Vitruvius*:

'Thus are expressed the number and names of the winds and the points whence they blow. To find and lay down their situation we proceed as follows:

'Let a marble slab be fixed level in the centre of the space enclosed by the walls, or let the ground be smoothed or levelled, so that the slab may not be necessary. In the centre of this plane, for the purpose of marking the shadow correctly, a brazen gnomon must be erected.

The Greeks call this gnomon skiatheras.'

'The shadow cast by the gnomon is to be marked about the fifth anti-meridional hour and the extreme point of the shadow accurately determined. From the central point of the space whereon the gnomon stands, as a centre, with a distance equal to the length of the shadow just observed, describe a circle. After the sun has passed the meridian, watch the shadow which the gnomon continues to cast till the moment when its extremity again touches the circle which has been described. From the two points, thus obtained in the circumference of the circle, describe two arcs intersecting each other and through their intersection and the centre of the circle first described draw a line to its extremity; this line will indicate the north and south points.

'One-sixteenth part of the circumference of the whole circle is to be set out to the right and left of the north and south points and drawing lines from the points thus obtained to the centre of the circle, we have one-eighth part of the circumference for the region of the north, and another eighth part for the region of the south. Divide the remainders of the circumference on each side into three equal parts and the divisions or

regions of the eight winds will be then obtained ; then let the directions of the streets and lanes be determined by the tendency of the lines which separate the different regions of the winds. . . .'

' Inasmuch as the brevity with which the foregoing rules are laid down may prevent their being clearly understood, I have thought it right to add for the clearer undertsanding thereof two figures. . . . The first shows the precise regions whence the different winds blow, the second, the method of disposing the streets in such a manner as to dissipate the violence of the winds and render them innoxious. '

' Let *A* be the centre of a perfectly level and plane tablet whereon a gnomon is erected. The ante-meridional shadow of the gnomon being marked at *B*, from *A*, as a centre with the distance *AB*, describe a complete circle. Then replacing the gnomon correctly, watch its increasing shadow, which after the sun has passed his meridian, will gradually lengthen till it become exactly equal to the shadow made in the forenoon, then again touching the circle at the point *C*, from the points *B* and *C*, as centres, describe two arcs cutting each other in *D*. From the point *D*, through the centre of the circle, draw the line *EF*, which will give the north and south points. Divide the whole circle into sixteen parts. From the point *E*, at which the southern end of the meridian line touches the circle, set off at *G* and *H* to the right and left a distance, equal to one of the said sixteenth parts, and in the same manner on the north side, placing one foot of the compasses on the point *F*, mark on each side the points *I* and *K*, and with lines drawn through the centre of the circle, join the points *GK* and *HI*, so that the space from *G* to *H* will be given to the south wind and its region ; that from *I* to *K* to the north wind. The remaining spaces on the right and left are each to be divided into three equal parts ; the extreme points of the dividing lines on the east sides, to be designated by the letters *L* and *M* : those on the west by the letters *NO* : from *M* to *O* and from *L* to *N* draw lines crossing each other : and thus the whole circumference will be divided into eight equal spaces for the winds. The figure thus described will be furnished with a letter at each angle of the octagon '.—(*Vitruvius*, Book I, Chap. vi).

' It is clearly by a divine and surprising arrangement, that the equinoctial gnomons are of different lengths in Athens, Alexandria, Rome, Placenza and in other parts of the earth. Hence the construction of dials varies according to the places in which they are to be erected : for from the size of the equinoctial shadow, are formed analemmata, by means of which the shadows of gnomons are adjusted to the situation of the place and the lines which mark the hours. By an analemma is meant a rule deduced from the sun's course and founded on observation of the increase

of the shadow from the winter solstice, by means of which, with mechanical operations and the use of compasses, we arrive at an accurate knowledge of the true shape of the world.'—(Book IX, Chap. IV.)

'From the doctrines of the philosophers above mentioned, are extracted the principles of dialling and the explanation of the increase and decrease of the days (shadows in the *Mānasāra*) in the different months. The sun at the times of the equinoxes, that is, when he is in Aries of Libra, casts a shadow in the latitude of Rome equal to eight-ninths of the length of the gnomon. At Athens the length of the shadows is three-fourths of that of the gnomon ; at Rhodes five-sevenths ; at Tarentum nine-elevenths ; at Alexandria three-fifths ; and thus at all other places the shadows of the gnomon at the equinoxes naturally differ. Hence in whatever place a dial is to be erected, we must first obtain the equinoctial shadow. If, as at Rome, the shadow be eight-ninths of the gnomon, let a line be drawn on a plane surface, in the centre whereof is raised a perpendicular thereto ; this is called the gnomon, and from the line on the plane in the direction of the gnomon let nine equal parts be measured. Let the end of the ninth part *A*, be considered as a centre, and extending the compasses from that centre to the extremity *B* of the said line, let a circle be described. This is called the meridian. Then of those nine parts between the plane and the point of the gnomon, let eight be allotted to the line on the plane, whose extremity is marked *C*. This will be the equinoctial shadow of the gnomon. From the point *C* through the centre *A*, let a line be drawn, and it will represent a ray of the sun at the equinoxes. Extend the compasses from the centre to the line on the plane, and mark on the left an equidistant point *E*, and on the right another, lettered *I*, and join them by a line through the centre which will divide the circle into two semi-circles. This line by the mathematicians is called the horizon. A fifteenth part of the whole circumference is to be then taken, and placing the point of the compasses in that point of the circumference *F*, where the equinoctial ray is cut, mark with it to the right and left the points *G* and *H*. From these, through the centre, draw lines to the plane where the letters *T* and *R* are placed, thus one ray of the sun is obtained for the winter and the other for the summer. Opposite the point *E*, will be found the point *I*, in which a line drawn through the centre, cuts the circumference ; and opposite to *G* and *H* the points *K* and *L*, and opposite to *C*, *F*, and *A*, will be the point *N*. Diameters are then to be drawn from *G* to *L*, and from *H* to *K*. The lower one will determine the summer and the upper the winter portion. These diameters are to be equally divided in the middle at the points *M* and *O*, and the points being thus marked,

through them and the centre *A* a line must be drawn to the circumference, where the letters *P* and *Q* are placed. This line will be perpendicular to the equinoctial ray and is called in mathematical language the Axon. From the last obtained points as centres (*M* and *O*) extending the compasses to the extremity of the diameter, two semi-circles are to be described, one of which will be for summer, the other for winter. In respect of those points where the two parallels cut that line which is called the horizon ; on the right hand is placed the letter *S*, and on the left the letter *V*, and at the extremity of the semi-circle, lettered *G*, a line parallel to the Axon is drawn to the extremity on the left, lettered *H*. This parallel line is called Lacotomus. Finally, let the point of the compasses be placed in that point where this line is cut by the equinoctial ray, and letter the point *X*, and let the other point be extended to that where the summer ray cuts the circumference, and be lettered *H*. Then with a distance equal to that from the summer interval on the equinoctial point, as a centre, describe the circle of the months, which is called Manacus. Thus will the analemma will be completed . . . '

' In all the figures and diagrams the effect will be the same, that is to say, the equinoctial as well as the solstitial days, will always be divided into twelve equal parts.'—(Book IX, Chap. VIII.)

(8) *Brahma-siddhānta-sphuṭa* of Brahmagupta (XIX, 1–20).

(9) *Pañcha-sidhāntikā* of Varāhamihira (II, 10–13 ; XIV, 1–11, 14–22.)

(10) *Mayamata* (VI, 1–28).

(11) *Śilparatna* of Śrīkumāra (XI, 1–22).

(12) *Kaśyapa-śilpa* (I, 60–70).

(13) *Vāstu-vidyā* (III, 7-10).

(14) *Manushyālaya-chandrikā* (II, 1–4).

ŚAṄKHA—A type of round building.

(1) *Agni-Purāṇa* (Chap. CIV, vv. 17–18 ; *see* under PRĀSĀDA).

(2) *Garuḍa-Purāṇa*, (Chap. XLVII, vv. 21, 23, 28–29 ; *see* under PRĀSĀDA).

ŚAṄKHA-KUṆḌALA—An ornament, an ear-ring of conch-shell.

(*M.*, LVI, 167, 170 ; *see* BHŪSHAṆA.)

ŚAṄKHA-PATRA—An ornament of leaf pattern, made of conch-shell.

(*M.*, LIV, 170 ; *see* BHŪSHAṆA.'

ŚĀTARDHIKA—A pavilion with eighteen pillars.

(*Matsya-Purāṇa*, Chap. CCLXX, v. 13 ; *see* under MAṆḌAPA.)

ŚATĀṄGA—A car, a carriage, a war-chariot, an arm-chair, a sofa.

(Ranganath inscrip. of Sundara-pandya, v. 14, *Ep. Ind.*, Vol. III, pp. 12, 15.)

See Chullavagga (VI, 2, 4; also VI, 20, 2; VIII, 1, 3) which reads Sattaṅgo. There seems to be another expression, Apasayam, to mean a sofa or arm-chair (*see* Buddhaghosa's note on *ibid.*, VI, 2, 4).

ŚATRU-MARDANA—A pavilion with thirty-four pillars.

(*Matsya-Purāṇa*, Chap. CCLXX, v. 11; *see* under MAṆḌAPA.)

ŚAMBHU-KĀNTA—A class of eleven-storeyed buildings.

(*M.*, XXIX, 2–8; *see* under PRĀSĀDA.)

ŚAYANA—Lying down, a bed, a couch, the recumbent posture, the roof of a house, a building material, a class of buildings in which the width (at the bottom) is the unit of measurement, the temples in which the idol is in the recumbent posture.

Compare Āsandi, Talpa, Proshṭha, and Vahya, the *Ṛig-Veda* (VII, 55, 8) refers to ' married woman occupying their commodious " talpas," the new bride on the fashionable " vahya " and other single women of the household on the " proshṭhas " within the family home (harmya).'

A bedstead (*M.*, III, 10, 11, 12; XLIV, 74, and colophon).

The recumbent posture (*M.*, LXII, 15; LXIII, 47, etc.).

A synonym of the roof of a house (*M.*, XVI, 56, 58; *see* PRACHCHHĀDANA).

The wood used in constructing a bedstead (*M.*, XLIV, 74).

A temple (*M.*, XIX, 7–11, *See* under APA-SAṀCHITA.)

ŚAYANA-MAṆḌAPA—A bed-chamber, sleeping apartments.

(*M.*, XXXII, 72, etc.)

ŚARKARĀ—Sugar, a small stone, a pebble, a gravel, sand, any hard particle.

A material of which idols are made (*M.*, LI, 6, etc.; *see* under ĀBHĀSA).

Cf. Mūsalena tu saṁpīḍya śarkarādi-samanvitam |

(*Suprabhedāgama*, XXXI, 110.)

ŚARMA—A house (*R.-V.*, VII, 82, 1).

ŚASTRA-MAṆḌAPA—An arsenal, a detached building for the storage of arms.

(*M.*, XXXII, 69, etc.)

ŚĀKHĀ—A branch, an arm, part of work, a wing, the door-frame, the door-post, the jamb.

(1) Śākhā-dvaye'pi kāryaṁ sārdhaṁ tat syād udumbarayoḥ ॥
Uchchhrāyāt pāda-vistīrṇā śākhā tadvad udumbaraḥ ।
Vistāra-pāda-pratimaṁ bāhulyaṁ śākhayoḥ smṛitam ॥
Tri-pañcha-sapta-navabhiḥ śākhābhis tat praśasyate ।
Adhaḥ-śākhā-chatur-bhāge pratihārau niveśayet ॥

(*Bṛihat-saṁhitā*, LIII, 24 ; LVI, 13, 14.)

(2) The third and fourth lines of the *Bṛihat-saṁhitā* quoted above are identical with those in the *Matsya-Purāṇa* (*see* Chap. CCLXX, vv. 20-21).

(3) Uchchhrāyāt pāda-vistīrṇā śākhās tadvad udumbare ॥
Vistārārddhena bāhulayaṁ sarveshām eva kīrtitam ।
Tri-pañcha-sapta-navabhiḥ śākhābhir dvāram ishṭadam ॥
Adhaḥ-śākhā-chaturthāṁśe pratihārau niveśayet ।
Mithunaiḥ pāda-varṇābhiḥ śākhā-śeshaṁ vibhūshayet ॥

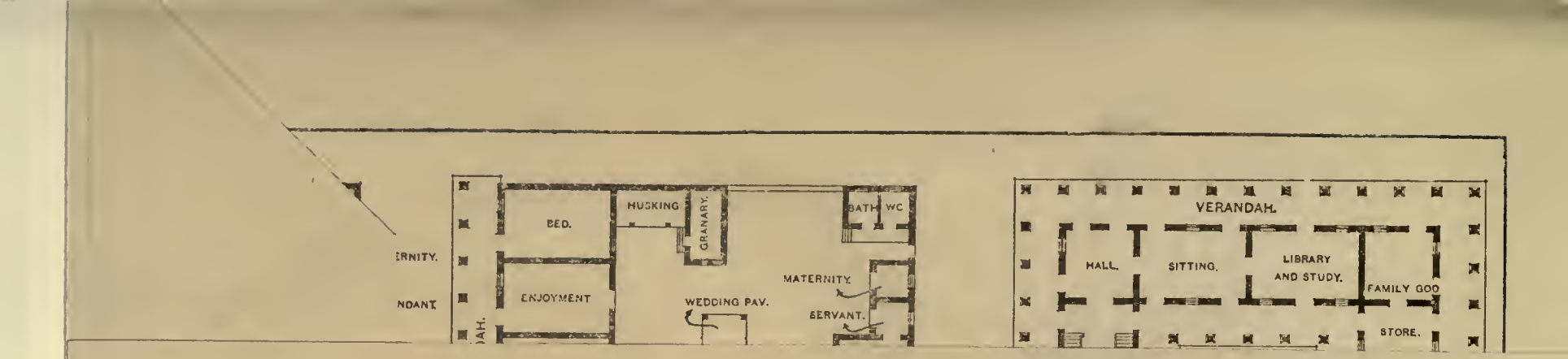
(*Agni-Purāṇa*, Chap. CIV, vv. 28–30.)

(4) A wing (Dabhoi inscrip. v. III, *Ep. Ind.*, Vol. I, p. 31).

ŚĀNTIKA (*see* UTSEDHA)—A measure, the height which is equal to the breadth.

(*See M.*, XXXV, 22–28, and *cf. Kāmikāgama*, L. 24-28, under ADBHUTA.)

ŚĀLĀ—'Primarily a thatch of straw (*chālā*) for shelter of men or their cattle and stores, then the homestead inclusive of such stalls and sheds (*A. V.* III, 12, 1 ; V, 31, 5 ; VI, 106, 3 ; VIII, 6, 10 ; IX, 3, 1 ; XIV, 1, 63 ; *Tait. Brā.* I, 2, 3, 1 ; *Sat. Brā.* III, 1, 1, 6) ; then houses generally as in Śālāpati or householder (*A.-V.*, IX, 3, 12) ; finally a section or a single room of a house as in patnī-śālā, agni-śālā. It came quite early to be used of flourishing and wealthy residences as in prāchīśa-śālā (*Sat. Brā.* X, 3, 3, 1 ; 6, 1, 1 ; *Chhand. Upanishd*, V, 11, 1 ; *Mund. Upanishad* I, 1, 3) and in the Śilpa-śāstra notably in the *Mānasāra* it is used for a storeyed mansion, a hall, a room, an apartment, a house, a stable, a stall. The three terms, śālā, maṇḍapa, and gṛiha, are sometimes indiscriminately used to imply houses in general. Gośālā (cow-shed) (*M.*, XXXII, 87), pāṭha-śālā (college or school) ; vāji-śālā, gaja-śālā, and mesha-śālā (*M.*, XL, 127–128, etc.) generally indicate a separate house for domestic animals ; while pāka-śālā (kitchen), etc., may imply a hall or room inside a small building also. But there is a clear distinction between maṇḍapa and śālā. 'Trees are stated (*Matsya-Purāṇa*, VII, 83-120) to have supplied to the primitive man the model of his future house. Śālā (house) is stated (vv, 117-120) to have been derived from Śākhā


ERNITY.
NDANT
BED.
ENJOYMENT
HUSKING
GRANARY.
WEDDING PAV.
BATH WC
MATERNITY.
SERVANT.
VERANDAH.
HALL.
SITTING.
LIBRARY
AND STUDY.
FAMILY GOO
STORE.

(branch), because originally branches were arranged lengthwise, breadthwise, crosswise, up and down, and thatch them to make the first house.'

Maṇḍapas are detached single-storeyed pavilions (*M.*, xxxiv) and Śālās are storeyed mansions furnished with pavilions (*M.*, xxxv).

(1) *Mānasāra* (Chap. xxxv, 1–404), named Śālā :

In this chapter 'śālā' is used mostly in the sense of a house. Śālās imply both temples and residential buildings for the Brahmans, the Kshatriyas, the Vaiśyas and the Śūdras (lines 1–2).

Their characteristic features as single buildings :

Śālāyāḥ parito'lindaṁ pṛishṭhato bhadra-saṁyutam । (40)
Purato maṇḍapopetaṁ . . . । (41)
Ekāneka-talāntaṁ syāt chūli-harmyādi-maṇḍitam । (47)

Like villages, Śālās are divded into six classes, namely, daṇḍaka, svastika, maulika, chatur-mukha, sarvato-bhadra, and vardhamāna (lines 3–4). Some of these with a certain number of halls are stated to be temples while others varying in the number of rooms are meant for the residences of different castes (lines 32–37). A distinction is made with regard to the number of storeys they should be furnished with (lines 78, 359–373, etc.).

The maximum number of storeys a śālā has is twelve as usual. All the storeys of all these śālās are described in detail (lines 5–401).

(2) *Kāmikagāma* (Chap. xxxv, 1–193*a*) :

Śālās are meant to be the dwellings of the Brāhmans and others (vv. 1–2) :

Eka-dvi-tri-chatuḥ-sapta-daśa-śālā prakīrtitāḥ ।
Tad-ūrdhvaṁ tri-tri-vṛidhyā tu yāvad ishṭaṁ pragṛihyatām ॥
Tā eva mālikāḥ proktā mālā-vat kriyate yataḥ ॥

Then follow the measurement (vv. 3–12), and the āyādi-shaḍvarga (vv. 13–20).

The different component parts of the Śālā :

Adhishṭhānaṁ cha pādaṁ cha prastaraṁ karṇam eva cha ।
Śikharaṁ stūpikā chaiva śālāṅgam iti kathyate ॥ (21)

The measurement of the base, pillar, entablature, tower, finial, and dome is given next (vv. 22–32).

The wall is also described (vv. 32, 33) :

Tri-hastāntaṁ tu vistāro bhittīnāṁ parikīrtitaḥ ॥
Mūla-bhitter idaṁ mānam ūrdhve pādārdha-hīnakam ।
Anyonyam adhikā vāpi nyūnā vā bhittayaḥ samāḥ ॥

The groups of Śālās are described (vv. 34–36).

The verandahs (alinda) are also described (vv. 36–38) :

Āsām agre tu alindāḥ syuḥ pradhāne vā viśeshataḥ ।
Eka-dvi-tri-chatush-pañcha-shaṭ-saptālinda-saṁyuṭa(-ā)ḥ ॥
Pṛishṭhe pārśve tathaiva syuḥ ishṭa-deśe athavā punaḥ ।

The courtyard (prāṅkaṇa or prāṅgaṇa) is described (*see* vv. 39–42). The adytum, the open quadrangle, and the upper storey, etc., are also described (vv. 45–57). This section is closed with the statement that the description of śālās given above is but general characteristics (v. 58).

This is followed by a brief reference to the uses of śālās :

Taitilānāṁ dvi-jātīnāṁ pāshaṇḍāśramināṁ api ।
Hasty-aśva-ratha-yodhānāṁ yāga-homādi-karmasu ।
Devānāṁ bhū-patīnāṁ cha nṛitta-gītādi-karmasu ॥ (58)

Then follow the architectural and other details of the storeys which number as many as sixteen (vv. 59–86) :

Evam eva prakāreṇa kuryād āshoḍaśa-kshmakam ॥ (86)

The śālās are, like the villages and towns, classified (vv. 87–88) :

Ādyam tu sarvato-bhadraṁ dvitīyaṁ vardhamānakam ।
Tritīyaṁ svastikaṁ proktaṁ nandyāvartaṁ chaturthakam ॥
Charukaṁ (for Ruchakam) pañcham-(aṁ) vidyāch chhālānām api-(abhi)dhānakam ॥

Details of these śālās are given next (vv. 89–96).

Maṇḍapas and śālās are distinguished from each other :

Maṇḍapaṁ tu vidhātavyaṁ śālānām agra-deśāke ॥ (96a)

The remaining portion of the chapter deals with some constituent members of śālās, such as the pīṭhikā, bhadra, khalūrikā (vv. 103, 117–118), gopura (v. 124a), chūli-harmya (v. 125), aṅkaṇa (v. 131), parigha (v. 132a), vaṁśa (vv. 147, 149), piṇḍa (v. 158), etc.

The stone-pillars and stone-walls are stated not to be built in residential śālās or buildings (v. 161) :

Śilā-stambhaṁ śilā-kuḍyaṁ narāvāse na kārayet ।

The drains (jala-dvāra), etc., are next described.

The chapter closes with an account of the rules regarding the situation of halls like the drawing-room (āsthāna-maṇḍapa, v. 191), kitchen (vv. 176–178), bedroom (v. 179), etc. :

Sarvadā bhinna-śālāsu sandhi-karma na kārayet ॥ (157a)
Devatā-sthāpanaṁ piṇḍaṁ śālāsu na vidhīyate ॥ (158)

Ibid., L, 90 (definition) :

Vaṁśādir aṁśa-rahitā śikhara-stūpikānvitā(ḥ) ।
Nāsikā-mukha-paṭṭāṁśā śāleti parikīrtitā ॥

(3) Dhana-dhānyaṁ cha vāyavye karmma-śālāṁ tato bahiḥ ।

'The treasury and granary should be built at the north-west, outside that should be the office.'—(*Matsya-Purāṇa*, Chap. CCLVI, v. 35.)

(4) Saṁpādaya padma-nidhe(ḥ) śālāṁ svarṇa-mayīṁ kuru ॥
Rathasyeśāna-dig-bhāge śālāṁ kṛitvā suśobhanām ।
Tan-madhye maṇḍapaṁ kṛitvā vediṁ tatra sunirmalām ॥
(*Skanda-Purāṇa, Vaishaṇava-khaṇḍa*, II, Chap. xxv, vv. 3, 26.)

(5) Mānavānāṁ gṛihā proktā vasavas te kakub-gatāḥ ।
Saṁsthāna-bhedena te jñeyāḥ pañchadhā syuḥ pramāṇataḥ ॥
Svayoni-vyāsa-gatayo dig-vidikshu cha saṁsthitāḥ ।
Bhinna-śālā cha sā proktā manujānāṁ śubha-pradāḥ ॥
Dig-vidikshv-eka-yonisthā paryastena tathaiva cha ।
Jñeyā chatur-śāleti śilpa-śāstra-nidarśibhiḥ ॥
(*Vāstu-vidyā*, ed. Śāstri, VIII, 1–3.)

(6) Pūrva-dakshiṇaṁ bhāgaṁ mahānaśaṁ hasti-śālāṁ koshṭhāgāraṁ cha ।
Paśchimottaraṁ bhāgaṁ yāna-ratha-śālā ।
(*Kauṭilīya-Artha-śātra*, Chap. xxv, p. 55.)

(7) Śālā-tri-bhāga-tulyā kartavyā vīthikā bahir bhavanāt ।

'Outside the dwelling one should make a gallery, being in width a third of the hall.'—(*Bṛihat-saṁhitā*, LIII, 20, *see J.R.A.S.* N. S., Vol. VI, p. 283.)

(8) Vyākhyāna-śālā—hall of study.—(Bheraghat inscrip. of Alhanadevi, v. 28, *Ep. Ind.*, Vol. II, pp. 13, 16.)

(9) Teneyaṁ kāritā śālā śrīviśālā monoramā ।
Dhātreva svechchhayā sṛishṭiḥ sthāpitādisura-trayaḥ ॥
Śālā Manovatīvaishā Brahma-yuktā virājate ।
Atra vidyārthinaḥ santi nānā-janapadodbhavāḥ ॥

'He got this school made here, magnificent in its splendour and handsome, as it were, made by the Creator after his own will, in which he placed the three principal gods. This school shines forth like Manovatī (a mythical town on mount Meru) joined by Brahman; here there are scholars born in various lands.'

'To judge by the description of it, the śālā must have been an establishment of some importance.'—(Salotgi pillar inscrip. no. A, vv. 16, 17, *Ep. Ind.*, Vol. IV, pp. 60, 61, 63, 58, note 5.)

(10) Go-śālā—cow-shed (three inscrip. from Travancore, no. B, line 3, *Ep. Ind.*, Vol. IV, p. 203).

(11) Nāṭya-śālā—a hall for religious music (dancing) built in front of the Durgā temple.—(Dirghasi inscrip. of Vanapati, line 15, *Ep. Ind.*, Vol. IV, pp. 316, 318.)

(12) Bhakta-śālā—an almshouse or place for the distribution of food.—(Assam Plates of Vallabhadeva, v. 13, *Ep. Ind.*, Vol. V, pp. 184, 183, 187.)

(13) Chakre-śrī-Aparājiteśa-bhavane śālā tathāsyāṁ rathaḥ Kailāśa-pratimas triloka-kamalālaṁkāra-ratnochchayaḥ ।

'For the temple of Aparājiteśa he provided a hall with a car richly decked with precious stones.'—(The Chahamanas of Naddula, no. C, Sundha hill inscrip. of Chachigadeva, v. 52, *Ep. Ind.*, Vol. IX, pp. 78, 74.)

(14) Chatu(ḥ)-śālāvasadha-pratiśraya-pradena ārāma-taḍāga-udapāna-kareṇa ।

'Who has given the shelter of quadrangular rest-houses and made wells, tanks, and gardens.'— (Nasik Cave inscrip. no. 10, line 2 f., *Ep. Ind.*, Vol. VIII, pp. 78, 79.)

(15) 'Caused to be built in stone the summit japa-śāle, satra, and a fort with bastion.'—(*Ep. Carnat.*, Vol. X, Bagepalli Taluq, no. 68; Transl., p. 240.)

(16) 'In the antarāla (or interior) they erected a most beautiful raṅga-maṇṭapa, and a fine chandra-śāle (or upper storey) according to the directions given by the King Timendra.'—(*Ep. Carnat.*, Vol. XII, Pavugada Taluq, no. 46; Transl., p. 46, line 14 f.; Roman Text, p. 203, v. 9.)

(17) 'By him this college (śālā) has been caused to be constructed (established), rich, spacious and beautiful . . . and this college full of the intelligence is resplendent with Brāhmaṇas. Here there are scholars born in various districts. For their subsistence is (hereby) provided.' (*cf.* no. 9 above).—(Salotgi inscrip., *Ind. Ant.*, Vol. I, p. 210, c. 2. para. 1.)

(18) Śāleyaṁ vividha-pravāsi-manuja-prājyopakāra-kshamā rathyā chatvara-ramya-koshṭa-vilasad-vātāyanā ślakshṇa-bhūḥ ।
Nānā-deśa-samāgatān pathi pariśrāntān asaṅgrāhiṇo nityaṁ bhojana-vāsa-dāna-vidhinā kāmānugān toshayet ॥

(Inscrip. from Nepal, no. 23, inscrip. of Queen Lalita-tri-pura-Sundarī, v. 4, Second Series, *Ind. Ant.*, Vol. IX, p. 194.)

(19) 'The building, represented in the plate as adjoining the temple, is a dharma-śālā, or house of rest, where pilgrims of good caste receive board and lodging gratis for a fixed period.'—(*Ind. Ant.*, Vol. XVI, p. 11, c. 2 line 1 f.)

(20) 'Erected a stone hall for gifts (dāna-śālā) in Jinanāthapura (a suburb of Śrāvana-Belgola).'—(*Ep. Carnat.*, Vol. II, inscrip. on Chandragiri, no. 40; Transl., p. 122, line 20, Roman Text, p. 10, line 4 from bottom upwards.)

(21) 'His mother . . . and his sister . . . erected a paddi-śālā in his memory.'—(*Ep. Carnat.*, Vol. II, no. 51; Transl., p. 120, last para.; Roman Text, p. 34, last three lines; Introduction, p. 51. para. 3.)

(22) Māḍida paḍaśāle (pada or pāda-śālā)—Mr. Rice translates it by verandah.—(*Ep. Carnat.*, Vol. III, Mysore Taluq, no. 59; Roman Text, p. 13; Transl., p. 6).

(23) ' He was pleased to set with precious stones the Kāndalur hall (śālai).'—(*Ep. Carnat.*, Vol. III, Tirumakūḍlu-Narasipur Taluq, no. 35; Roman Text, p. 147, line 1; Transl. p. 74, line 1 f.)

(24) Endowed it (basadia or Jaina temple) with Arhanahaḷḷi (a village or town), together with a fine tank, a street with a hall for gifts (dāna-śālā) in the middle, two oil-mills and two gardens.—(*Ep. Carnat.*, Vol. IV, Kṛishṇarājapeṭ Taluq, no. 3; Transl., p. 99; Roman Text, p. 159, last three lines.)

(25) Out of love for (the god) Chennigarāya, erected the yāga-śāle.—(*Ep. Carnat.*, Vol. V, Part I, Belur Taluq, no. 13; Transl., p. 147; Roman Text, p. 107.)

(26) ' Śrī - Gopāla - svāmiyavara - nava-raṅga - paṭṭa-śāle prākāra-vanu kaṭṭisi.'

For the god Gopāla . . . he erected the nava-raṅga, the paṭṭa-śālā, and the enclosure wall.

Nava-raṅga prākāra-paṭṭa-śāle-samasta-dharmma—' this nava-raṅga, enclosure wall and paṭṭa-śālā and all other work of merits were carried out by . . . .'—(*Ep. Carnat.*, Vol. V, Part I, Channarayapatna Taluq, no. 185; Roman Text, p. 467; Transl., p. 205.)

(27) ' The virūpāksha-śālā was erected to the temple.'

The inscription is ' on the floor of the maṇṭapa in front of the Virabhadra temple. Śālā apparently means here a maṇḍapa or detached building (pavilion) where the god Virūpāksha is installed.'—(*Ep. Carnat.*, Vol. VI, Koppa Taluq, no. 4; Transl., p. 76; Roman Text, p. 166.)

(28) ' To the thousand of Gautamagrāma were given three śālās (halls or public rooms) to continue as long as moon and stars.'

Śāle or śālā in the sense of a hall or house has been used in this inscription more than twenty-five times.—(*Ep. Carnat.*, Vol. VIII, Shikarpur Taluq, no. 45 (bis), Transl., pp. 49, 50; Roman Text, pp. 97–98).

ŚĀLĀ-GṚIHA—A dwelling house, a type of building.

A type of rectangular building:

(1) *Agni-Purāṇa* (Chap. CIV, vv. 16–17; *see* under PRĀSĀDA).

(2) *Garuḍa-Purāṇa* (Chap. LXVII, vv. 21–22, 26–27; *see* under PRĀSĀDA).

ŚĀLĀṄGA—The limbs of the śālā (hall or house), the essential parts of a house comprising the basement, pillar, entablature, tower, dome, and finial.

Adhiṣṭhānaṁ cha pādaṁ cha prastaraṁ karṇam eva cha |
Śikharaṁ stūpikā chaiva śālāṅgam iti kathyate ||

(*Kāmikāgama*, XXV, 21.)

ŚĀLĀ-BHAÑJIKĀ—A wooden middled image.

(*Bharata-Nāṭya-śāstra*, II, 79.)

ŚĀLĀ-MĀLIKĀ—A class of buildings, a type of hall.

(*Kāmikāgama*, XXXV, 6 ; *see* under MĀLIKĀ.)

ŚĀSANA—An architectural member, a plate, a part of an enclosing wall.

Tad (mukha-bhadra)-agre vātha pārśve cha kuryāt sopāna-bhūshaṇam ।
Tasya (maṇḍapasya) madhye cha raṅge tu mauktikena prapānvitam ।
Tan-madhye śāsanādīnāṁ toraṇaṁ kalpa-vṛikshakam ।

(*M.*, XXXIV, 217–219.)

ŚĀSTRA (*see* TANTRA)—Science (of Architecture).

ŚIKHARA—The top, an apex, a spire, a cupola, the lower part of the finial, a spherical roof rising like an inverted cup (Latin cupa) over a circular, square or multangular building, a small tower or turret. Above the dome (stūpi) are built in order śikhara, śikhā, śikhānta, and śikhāmaṇi.

(1) Small towers or turrets (*Bṛihat-saṁhitā*, LVI, 21, *J.R.A.S.*, N. S., Vol. VI, p. 319).

(2) *See M.*, XVIII, 276, XIX, 51, etc.

(3) Pādoktaṁ sarva-mānaṁ tu śikharo'pi vidhīyate ॥
Dhruva-vidhāna-rītyā vā śikharaṁ parikalpayet ॥

(*Kāmikāgama*, XXXV, 29, 30).

The synonyms :

Śikharaṁ śiraḥ mūrdhā cha śikhā mauliś cha muṇḍakam ।
Śīrshaṁ kam iti vijñeyaṁ śiro-vargasya paṇḍitāḥ ॥

(*Ibid.*, L, 206.)

(4) Vānarendra-gṛiham . . . śukla-prāsāda-śikharaiḥ kailāśa-śikharopamaiḥ ।

(*Rāmāyaṇa*, IV, 33, 15 ; *see also* IV, 26, 31 ; VI, 41, 88, under PRĀSĀDA.)

(5) Spire :

Devuniki śikharamu gaṭṭiṁchi śikhara-maṁṭapa-gopuralu ।

(Kondavidu inscrip. of Krishnaraya, v. 27, *Ep. Ind.*, Vol. VI, pp. 237, 232.)

(6) Mūla-śikhare cha kanaka-maya-dhvaja-daṁḍasya dhvajāropaṇa-pratishṭhāyāṁ kṛitāyām—' also of the hoisting of the flag on the golden flag-staff on the original spire.'—(The Chahamanas of Marwar, no. XIX, Jālor stone inscrip. of Samarasimhadeva, line 4 f., *Ep. Ind.*, Vol. XI, p. 55.)

(7) Idu-rajatādri hema-śikhara-pratipattiyan-Īśānīye pettudu Harahāsa-kalpa-taru keṁdaḷirindesev-agra-bhāgadoḷ-puḍidud Umādhināthasita-gātra-sapiṁga-suṭuṁga-juṭadondo-ḍavenīpa Svayaṁbhū-śivagehada poṁgaḷaśaṁ sa-maṁgaḷam ॥

'The golden spire, with its auspicious ornament of this house of Svayaṁbhū-Śiva is such that it may be said that this is the silver mountain which has obtained, by the gift of Īśa, the possession of a golden summit; it is a tree of desire on the (white pile of) Hara's laughter (namely, the mountain Kailāśa), crowned by a summit radiant with young red spouts, in it there is combined the unique substance of the white body and the tawny towering matted hair of the Lord of Umā.'—(Inscrip. from Yewur, B. of A. D. 1017, v. 98, *Ep. Ind.*, Vol. XII, pp. 282, 289.)

(8) Prāsādam ūrddhva-śikhara-sthira-hema-kumbham ।

'(Into) the temple (which by the stately display of) firm golden capitals upon lofty spires. . . . '—(Bhūvaneśwar inscrip. v, 15, line 11, *Ep. Ind.*, Vol. XIII, pp. 152, 154.)

(9) Vistīrṇṇa-tuṁga-śikharam—'(a temple having) broad and lofty spire.' Manoharaiḥ-śikharaiḥ—with (its) charming spires.

(Mandasor stone inscrip. of Kumaragupta, lines 17, 20, *C. I. I.*, Vol. III, F. G. I., no. 18, pp. 83, 86, 87).

(10) 'For this god Prasanna-Virūpāksha, a temple, enclosing wall, gopura, finial (śikhara) covered with gold, a Manmatha tank, decoration, and illuminations . . . .'—(*Ep. Carnat.*, Vol. X, Mulbagal Taluq, no. 2; Roman Text, p. 82; Transl., p. 71.)

The same word in a similar sentence is translated by 'tower' in the following inscriptions:

(11) 'For the god Prasanna-Someśvara having restored the temple, enclosure, tower (śikhara), Manmatha tank, the endowed villages, the maṇṭapas for alms, and all other religious provisions.'—(*Ibid.*, no. 18; Roman Text, p. 87; Transl., p. 75.)

(12) Varadaraja-devara sikhara (śikhara)—'the spire of Varadaraja's temple.'—(*Ibid.*, Malur Taluq, no. 4; Roman Text, p. 187; Transl., p. 156.

(13) 'And erecting a stone pillar, according to the rules set up the spire or tower (śikhara).'—(*Ibid.*, Vol. XII, Pāvugada Taluq, no. 46; Transl., p. 122, line 16; Roman Text, p. 203, v. 10.)

(14) Garbha-gṛiha-sthita-maṇṭapa-śikharam—'the ruined tower over the shrine (of the god Arkanātha).'—(*Ibid.*, Vol. III, Maḷavaḷḷi Taluq, no. 64; Roman Text, p. 127, line 3; Transl., p. 63.)

(15) 'Śik(h)ara—applied to the summit of a tower.' Rea.—(Chalakyan architecture, *Arch. Surv.*, New Imp. Series, Vol. XXI, p. 39.)

(16) 'The platform on which this temple stands is approached by twelve steps, and six more lead to the sanctum, over which rises a tall dome or truncated sikri (śikhara).'—(Cunningham, *Arch. Surv. Reports*, Vol. xxiii, p. 135.)

(17) 'Sikhara (sikar, sikri)—Steeple of temple'.—(Vincent Smith, Gloss., *loc. cit.*, to Cunningham's *Arch. Surv. Reports*.)

(18) In the temples of Champa three distinct types of śikhara are noticed. The common type consists of a series of four storeys, diminishing as they rise, a curvilinear stone slab being as the crowning moulding. Another type comprises two storeys; the upper is ridge-shaped looking like an elongated arched vault with ogival ends at two sides with a slightly concave curve at the top. The third type 'consists of a curvilinear pyramidal dome springing directly from the walls of the sanctuary, and surmounted by a massive circular member of corrugated form' resembling Āmalaka of Indian temples.

(For details *see* Inventaire Descriptif des Monuments Chams D. L. Annam by Parmentier, as summarized by R. C. Mazumdar, Champa, 1, Chap. x, pp. 236, 237.)

ŚIKHĀ—The lower part of the finial, pinnacle or small turret-like termination.

Śikhā is the upper part, and śikhara, the lower:

Śikharordhva-śikhottuṅgaṁ stūpi-traya-samam eva cha।
Prastarādi-śikhāntaṁ syād gaṇya-mānaṁ pravakshyate।

(*M.*, xxxiii, 141, 144, etc.)

ŚIKHĀNTA—The finial (Latin finis), the top or finishing portion of a pinnacle.

(*M.*, xi, 119, etc.)

ŚIKHĀ-MAṆI—The crest-jewel, the top end of the finial, the apex.

(*M.*, xlix, 85, lxvii, 31, etc.)

Cf. Śiro-ratna—crest-jewel.—(Deopara inscrip. of Vijayasena, v. 14, *Ep. Ind.*, Vol. 1, pp. 308, 313.)

ŚIBIKĀ—A synonym of yāna or conveyance, a litter, a palanquin.

(*M.*, iii, 9, etc.)

ŚIBIKĀ-GARBHA—A square hall.

Śibikā-gabbho ti chaturassa-gabbho.—(Buddhaghosha, *Chullavagga*, vi, 3, 3.)

The interpretation of Oldenberg and Rhys Davids as 'quart-measure shaped' is not supported by the Commentator Buddhaghosha as quoted above.

ŚIBIKĀ-VEŚMA—A type of rectangular building.

(1) *Agni-Purāṇa* (Chap. CIV, vv. 16–17, *see* udder PRĀSĀDA).

(2) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 21–22, 26–27, *see* under PRĀSĀDA).

ŚIBIRA—A camp, a royal residence, a fortified city.

(*M.*, X, 40, etc.)

Samā(sāma)ntānāṁ samṛiddhānāṁ yat sthānaṁ śibiraṁ smṛitam ।
Gaja-vāji-samāyuktaṁ senā-sthānaṁ tad eva hi ॥

(*Kāmikāgama*, XX, 11.)

ŚIRAS—The head, the finial, the top, the summit, the pinnacle.

(*M.*, XV, 231, etc. ; LVII, 54, etc.)

ŚIRASTRAKA(-STRĀṆA)—A head-gear, a helmet.

(*M.*, XLIX, 13, etc. ; *see* BHŪSHAṆA.)

ŚIRĀLAMBA—A crowning ornament of a column.

(*M.*, XV, 101 ; *see* STAṀBHA.)

ŚILĀ-KARMA—Masonry, the art of building in stone, the stone-work

Sugana-raje-Dhanabhūtana kāritaṁ toraṇaṁ śilākaṁmaṁto cha upaṁno (śilā-karmāntaś-chotpannaḥ) ।

'During the reign of the Suṅgas (this) gateway was erected and the masonry finished by Dhanabhuti.'—(Sunga inscrip. of the Bharhut Stupa, line 3 f., *Ind. Ant.*, Vol. XIV, pp. 138, 139 ; no. 1, Vol. XXI, pp. 227.)

ŚILĀDHIVĀSANA—Preparation of stones for building, the worship of stones for building.

Śilādhivāsana(ḥ)-karmma yathāvidhi sampādya tasminn-eva śake bhādra-kṛishṇa-navamyāṁ śukle śilā-praveśam vidhāya . . . .

'The worship of the stones for the building.' Dr. Bühler and Bhagvanlal Indraji.

This interpretation of Śilādhivāsana does not seem to be appropriate. The term may refer to some processes or ceremonies similar to those in connexion with Śilā-saṁgraha or collecting and selecting stones for buildings.—(Inscrip. from Nepal, no. 23 ; Inscrip. of Queen Lalita-tri-pura-sundarī, line 14, *Ind. Ant.*, Vol. IX, pp. 193, 194, c. 2.)

ŚILĀ-PAṬṬA-VAṀŚA—'Now known as Silawat caste, who are masons and found in the neighbourhood of Damoh.' Rai Bahadur Hiralal.

(*Ep. Ind.*, Vol. XII, p. 44, note 1.)

S(ś)ilā-paṭṭa-śubhe vaṁśe sūtradhārā vichakshaṇāḥ ।
Bhojukaḥ Kāmadevaś cha karmanisṭhā Halā sudhīḥ ॥

(Batihagarh stone inscrip., v. 12, *ibid.*, p. 46.)

ŚILĀ-PRAVEŚA—Laying the corner-stone or foundation.

Śilādhivāsana(ḥ)-karmma yathāvidhi sampādya tasminn eva śake . . . śilā-praveśaṁ vidhāya—' the corner stone was laid.' Dr. Bühler and Bhagvanlal Indraji.—(Inscrip. from Nepal, no. 23, , inscrip. of Queen Lalita-tri-pura-sundarī, line 14, *Ind. Ant.*, Vol. IX, pp. 193, 194, c. 2.)

ŚILĀ-MARDDAKA (ŚILE-MUDDAS)—A guild of stone masons, the stone-cutters.

' Śile is the Canarese form of the Sanskrit śilā, a stone, and Mudda is a jaṁgam or Liṅgāyat name. Śile-mudda must be the name of some particular guild of stone-masons.' Dr. Fleet.—(Sanskrit and Old Canarese inscrip., no. 114, line 1, *Ind. Ant.*, Vol. X, pp. 170, 117, note 58.)

ŚILĀVEDĪ—The stone terrace on which sacred trees usually stand.

Cf. Mahāvaṁśa, 36, 103, 1.

ŚILĀ-VEŚMA—Stone-houses, cave-houses.

Cf. Megha-dūta, 1, 25 (quoted by Prof. Lüders, *Ind. Ant.*, Vol. XXXIV, p. 199.)

ŚILĀ-STAMBHA—The stone column, a kind of column, the monolith.

Shaṭ-saptāshṭāṅgulaṁ vāpi śilā-stambha(ṁ)-viśālākam ।
Vṛittam vā chatur-aśraṁ vā ashṭāśraṁ shoḍaśāsrakam ।
Pāda-tuṅge'shṭa-bhāge tu tri(trya)ṁśenordhvam alaṅkṛitam ।
Bodhikaṁ mushṭi-bandhaṁ cha phalakā tāṭikā ghaṭam ।
Sarvālaṅkāra-saṁyuktaṁ mūle padmāsanānvitam ।
Chatur-dikshu chatur-bhadraṁ kechid bhadraṁ tu kārayet ।
Kuṭṭimaṁ chopapīṭhaṁ vā sopapīṭha-masūrakam ।
Athavā chihna-vediḥ syāt prapālaṅkāram uchyate ।

(*M.*, LVII, 15–22.)

ŚILPA-ŚĀSTRA—The science of architecture and other cognate arts.

See details under VĀSTU, VĀSTU-VIDYĀ and VĀSTU-KARMAN.

See also the Preface of this Encyclopaedia and the Preface of *Indian Architecture* by the writer.

ŚILPI-LAKSHAṆA—The description of the artists : their qualifications, rank, caste, etc. (*see* under STHAPATI).

ŚILPI-ŚĀLĀ—A school or workshop of architecture.

(*M.*, LXVIII, 50.)

ŚIVA—A class of buildings.

(*Kāmikāgama*, XLV, 35–38 ; *see* under MĀLIKĀ.)

ŚIVA-KĀNTA—The pentagonal or five-sided pillar furnished with five minor pillars.

(*M.*, XV, 22, 245 ; *see* under STAMBHA.)

ŚIVA-MAṆḌAPA—The Śiva temple, a type of pavilion.

(*M.*, XXXIV, 196.)

ŚISHṬA-MAṆḌAPA—A type of pavilion.

(*See Kāmikāgama*, under ARDHA-MAṆḌAPA.)

ŚIRSHA—The top end of a building, almost same as śikhānta.

Śīrsham cha śikhā-grīvam vṛittam syād vaijayāntikam ।

(*M.*, XIX, 181, etc.)

ŚUKA-NĀSĀ(-SIKĀ)—The parrot's nose, an object having an acquiline nose, the part of the finial looking like the parrot's nose. The lower half part of a tower.

(1) Chaturdhā śikharam bhajya ardha-bāga-dvayasya tu ।
Śuka-nāsam prakurvīta tritīye vedikā matā ॥

(*Matsya-Purāṇa*, Chap. CCLXIX, v. 18.,

(2) Śikharārtham (?-dham) hi sūtrāṇi chatvāri vinipātayet ।
Śuka-nāśo(-sā)rddhataḥ sūtram tiryyag-bhūtam nipātayet ।
Śikharasyārdha-bhāgastham simham tatra tu kārayet ।
Śuka-nāsam sthirīkṛitya madhya-sandhau nidhāpayet ॥
Apare cha tathā pārśve tadvat sūtram nidhāpayet ।
Tad-ūrddhvam tu bhaved vedī sakaṇṭhā mānasārakam ॥

(*Agni-Purāṇa*, Chap. XLII, vv. 15–17.)

Chaturdhā śikharam kṛitvā śuka-nāsā dvi-bhāgikā ॥

(*Ibid.*, Chap. CIV, v. 10.)

(3) Prāsādau nirgatau kāryau kapotau garbha-mānataḥ ।
Ūrdhvam bhitty-uchchhrāyāt tasya mañjarīm tu prakalpayet ॥
Mañjaryāś chārdha-bhāgena śuka-nāsam prakalpayet ।
Ūrdhvam tathārdha-bhāgena vedi-bandho bhaved iha ॥

(Viśvak, 6, 767, quoted by Kern, *J. R. A. S.*, N. S., Vol. VI, p. 321, note 2 of p. 320.)

The above lines are identical in the *Matsya-Purāṇa* (Chap. CCLXIX, vv. 11–13).

(4) Vṛittākāraṁ samaṁ chet tu toraṇāṅghrivad āyatam ।
Sakandharaṁ tad-ūrdhve tu śuka-nāsyā vibhūshitam ॥
Garbha-dvi-tri-kara-vyāsa-śuka-nāsā mukhe mukhe ।
Na kartavyā vimāneshu nāsikordhve na nāsikā ॥

(*Kāmikāgama*, LV, 120, 157.)

ŚUKĀṄGHRI—A type of pillar.

Ūrddhva-kshetra-samā jaṅghā jaṅghārddha-dvi-guṇaṁ bhavet ।
Garbha-vistāra-vistīrṇaḥ śukāṅghriś cha vidhīyate ॥
Tat-tri-bhāgena karttavyaḥ pañcha-bhāgena vā punaḥ ।
Nirgamaṁ tu śukāṅghreś cha uchchhrāyaḥ śikharārddhagaḥ ॥

(*Garuḍa-Purāṇa*, Chap. XLVII, vv. 3–4; *see* also vv. 13, 17.)

ŚUDDHA—A house built (generally) of one material, namely, wood, brick, or stone, etc.

Drumeṇeshṭakayā vāpi dṛiśadādyair athāpi vā ।
Etena sahitaṁ geharn śuddham ity-abhidhīyate ॥

(*Kāmikāgama*, XLV, 21.)

See also *Mānasāra*, etc. under PRĀSĀDA.

ŚUMBHAṀKARI—The fifth or composite type of the five Indian orders.

(*Suprabhedāgama*, XXXI, 65, 67; *see* under STAMBHA.)

ŚŪLA—A pike, a dart, a lance, the trident of Śiva, the finial.

A dart (*M.*, VII, 223, 236; LIV, 142).
A synonym of śikhā or finial (*M.*, XVII, 126).
A pike as a component part of the cage for the tiger.—(*M.*, L, 262.)

ŚŪLA-KAMPA (*see* ŚŪLA)—A pike.

Paritaḥ śūla-kampaṁ syād dvāraṁ tad dakshiṇottaram ।

(*M.*, XL, 136.)

ŚṚIṄKHALĀ—A chain.

In connexion with the bedstead :
Chaturbhiḥ śriṅkhalā-yuktam āndolaṁ chaikatopari ।

(*M.*, XLIV. 70).

ŚṚIṄGA—The top, the turret, elevation, height, the spire, a horn.

(*M.*, LXII, 25, etc.)

Śṛiṅgeṇaikena bhavet—furnished with one spire.

(*Bṛihat-saṁhitā*, LVI, 23, 26, *J. R. A. S.*, N. S., Vol. VI, p. 319.)

ŚṚIṄGĀRA-MAṆḌAPA—A bed-chamber, the pavilion or room where the deity of a temple is made to retire at night.

Devānāṁ cha vilāsārthaṁ śṛiṅgārākhyaṁ tu maṇḍapam ।

(*M.*, XXXIV, 388, etc.)

ŚMASĀNA (*see* CHAITYA)—Funeral and memorial structures, tombs of various shapes, round and dome-shaped (parimaṇḍalā, *Sat. Brā.*, XIII, 8, 1), hemispherical bowl-shaped (chamū) resembling a vault, enclosed by an indefinite number of enclosing stones (*ibid.*, XIII, 8, 2, 2) or bricks (*A.-V.*, XVIII, 4, 55), square or quadrilateral (*Sat. Brā.*, XIII, 8, 1, 1), as also pyramidal as in later temples and śikharas. Compare Buddhist stūpas. The three main types described in the *Śatapatha Brahmaṇa* and referred to in *R.-V.*, and *A.-V.*, Vāstu (reliquary of bones, etc.) or tumulous, round or square ; Grihān or house with many chambers probably dedicated to some religious or philanthropic use and 'erected over or beside the grave in memory of the deceased or built underground as rock-cut caves ; and Prajñānam or a memorial monument or pillar four of which were set up in four corners of the grave out of which Buddhist memorial pillars might have grown up'. (For further details, compare Sarkar, *ibid.*)

ŚYĀMA-BHADRA—A type of pavilion with fourteen pillars.

(*Matsya-Purāṇa*, Chap. CCLXX, v. 14 ; *see* MAṆḌAPA.)

ŚRĀNTĀ—An architectural ornament, a shed.

In connexion with single-storeyed buildings :

Evaṁ proktaṁ harmyake madhya-bhadram ।
Śālā-koshṭhaṁ dig-vidike kūṭa-yuktā ।
Hārā-śrāntā-nāsikā-pañjarāḍhyam ।

(*M.*, XIX, 192–194.)

ŚRĪ-KAṆṬHA—Anything possessing a beautiful neck, a class of buildings.

A type of octagonal buildings (*Agni-Purāṇa*, Chap. CIV, vv. 20–21, *see* under PRĀSĀDA).

ŚRĪ-KARA—An order, a class of columns, a type of storeyed buildings, a sect of people, a sub-caste of the Kayasthas, originally those who used to write the legal documents (Karaṇa), hence the clerical community, clerks.

(1) One of the five orders (*Suprabhedāgama*, XXXI, 65, 66 ; *see* under STAMBHA).

(2) A class of single-storeyed buildings (*M.*, XIX, 170, *see* under PRĀSĀDA).

(3) A class of two-storeyed buildings ; the measurement of the component parts (*see* under ŚALĀŃGA), etc. (*M.*, XX, 93, 2–9 ; *see* under PRĀSĀDA).

(4) A sect of people (*M.*, IX, 152, 226, etc.).

ŚRĪ-KĀNTA—A type of storeyed building, a class of bases comprising four types which differ from one another in the addition or omission of some mouldings and also in height.

(*M.*, XIV, 371–387 ; *see* the list of mouldings under ADHISHṬHĀNA.)

A class of three-storeyed buildings (*M.*, XXI. 2–11 ; *see* under PRĀSĀDA).

A class of seven-storeyed buildings (*M.*, XXV, 24 ; *see* under PRĀSĀDA).

ŚRĪ-JAYA—A type of oval building.

(1) *Agni-Purāṇa*, (Chap. CIV, vv. 19-20, *see* under PRĀSĀDA).

(2) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 29–30, *see* under PRĀSĀDA).

ŚRĪ-PADA—A class of buildings.

. . . . Śrī-padaṁ cha tataḥ śṛiṇu ।
Koshṭhakāstv-iha chatvāraś chatush-koṇeshu chaiva hi ॥
Chatur-nāsī-samāyuktam anu-nāsī-daśāshṭakam ।
Evaṁ lakshaṇa-saṁyuktam śrī-padaṁ tv-iti kīrtitam ॥

(*Suprabhedāgama*, XXXI, 50, 51).

ŚRĪ-PĀDA—The footprint of Buddha on Adam's Peak in Ceylon, otherwise called Ratnapāda. For details, *see* BUDDHA-PĀDA.

ŚRĪ-BANDHA—A class of bases comprising four types which differ from one another in the addition or omission of some mouldings.

(*M.*, XIV, 109–122 ; *see* the list of mouldings under ADHISHṬHĀNA.)

ŚRĪ-BANDHA-KUṬṬIMA—The flat part of the Śrī-bandha type of bases.

(*M.*, XLIV, 43.)

ŚRĪ-BHADRA—A kind of throne, a type of pedestal.

A class of thrones (*M.*, XLV, 13, etc.).

A kind of pīṭha or the pedestal of the phallus (*M.*, LIII, 36, etc.)

ŚRĪ-BHOGA—A type of storeyed buildings, a class of bases comprising two types which differ from each other in the addition or omission of some mouldings.

(*M.*, XIV, 260–280, *see* the list of mouldings under ADHISHṬHĀNA.)

A class of seven-storeyed buildings (*M.*, XXV, 25 ; *see* under PRĀSĀDA).

ŚRĪ-MUKHA—A beautiful face, a kind of throne.

(*M.*, XLV, 14, etc., *see* under SIṀHĀSANA.)

ŚRĪ-RŪPA—A type of pavilion.

(*M.*, XXXIV, 478, etc.; *see* under MAṆḌAPA.)

ŚRĪ-VATSA—A class of buildings, a type of pavilion, a special mark on the breast of the image of Vishṇu.

A pavilion with 48 pillars (*Matsya-Purāṇa*, Chap. CCLXX, v. 9 ; *see* under MAṆḌAPA).

A type of quadrangular buildings :

(1) *Agni-Purāṇa*, (Chap. CIV, vv. 14–15 ; *see* under PRĀSĀDA).

(2) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 24–25 ; *see* under PRĀSĀDA).

A particular mark on the breast of Vishṇu or Kṛishṇa 'represented in pictures by a symbol resembling a cruciform flower.'—(*M.*, XLIX, 150; LV, 92 ; XVIII, 375, etc.)

ŚRĪ-VIŚĀLA—A type of gate-houses, a class of storeyed buildings, a kind of throne, a type of pedestals.

A class of gopuras or gate-houses (*M.*, XXXIII, 555).

A class of single-storeyed buildings, (*M.*, XIX, 168 ; *see* under PRĀSĀDA).

A kind of throne (*M.*, XLV, 13 ; *see* SIṀHĀSANA).

A type of the pīṭha or pedestal of the phallus (*M.*, LIII, 39).

ŚRĪ-VṚIKSHA (*see* KALPA-VṚIKSHA)—An ornamental tree employed as a carving.

Śesham maṅgalya-vihagaiḥ śrī-vṛiksha-svastikair ghaṭaiḥ ।
Mithunaiḥ patra-vallibhiḥ pramathaiś chopaśobhayet ॥

'Let the remaining part (of the door) be ornamented with sculptured birds of good augury śrī-vṛiksha-figures, crosses (svastika), jars, cupolas, foliage (leaves and creepers), tendrils and goblins.'—(*Bṛihat-saṁhitā*, LVI, 15, *J. R. A. S.*, N. S., Vol. VI, p. 318.)

ŚRUTIṀJAYA—A pavilion with forty-eight pillars.

(*Matsya-Purāṇa*, Chap. CCLXX, v. 10, *see* under MAṆḌAPA.)

ŚREṆITA-DVĀRA—A kind of door, doors or gates in a row.

Madhye dvāram tu kuryād madhya-sutrāt tu vāmake ।
Kuryāj jala-dvāram tu śreṇita-dvāram kalpayet ।

(*M.*, XXXVIII, 39–40.)

ŚREṆI(-ṆĪ)-BANDHA—A class of bases comprising four types which differ from one another in height and in the addition or omission of some mouldings.

(*M.*, XIV, 149–175; *see* the list of mouldings under ADHISHṬHĀNA.)

ŚROṆI (-ṆĪ)—The buttocks (of an image), the hip or loins, a waist-band, a string worn round the loins; figuratively used for building also, *compare* KAṬI.

ŚVETA-MAṆḌA—The white part of the eye of an image.

(*M.*, LXV, 68.

SH

SHAṬ-TALA—The sixth storey, the six-storeyed buildings.

Their general features (*M.*, XXIV, 27–46).

Thirteen types (*ibid.*, 2–26; *see* under PRĀSĀDA.)

SHOḌAŚA-TALA (*see* GOPURA)—The sixteenth storey, the sixteen-storeyed gate-houses.

Evam eva prakāreṇa kuryād āshoḍaśa-kshmakam।

(*Kāmikāgama*, XXXV, 86.)

SHAḌ-VARGA—A group of six, six formulas, 'with which the perimeter of a structure should conform,' six proportions, six main component parts of a building comprising adhishṭhāna (base), pāda or stambha (column), prastara (entablature), karṇa (ear, wings) śikhara (roof), and stūpi (dome).

(1) According to the *Mānasāra* the Āyādi-Shaḍ-varga represents a set of six formulas with which any particular measurement must conform before it can be accepted. Mention of the Shaḍ-varga is found also in the Bimba-māna and the Āgamas. The formulas in each case, however, are not the same and differ in these several works (*see* below).

The formulas according to the *Mānasāra*:

Āya	is the remainder of	$\frac{l \times 8}{12}$	(l for length).
Vyaya	,, ,,	$\frac{b \times 9}{10}$	(b for breadth).
Ṛiksha	,, ,,	$\frac{l \times 8}{27}$	
Yoni	,, ,,	$\frac{b \times 3}{8}$	

Vāra is the remainder of $\frac{c \times 9}{7}$ (*c* for circumference, thickness or height).

Tithi ,, ,, ,, $\frac{c \times 9}{30}$

Aṁśa[1] ,, ,, ,, $\frac{c \times 4}{9}$

Eteshāṁ grāma-rūpāṇām āyādi-lakshaṇaṁ tathā ।
Nandāyāma-samūhe vā chāyate vātha vistare ।
Pariṇāhe pade vāpi āyādi-śuddhiṁ cha kārayet ।
Kechit tv-āyatane chaivam āyaṁ cha tad-dine (nakshatre) bhavet ।
Pariṇāhe tithir vāraṁ vyaya-yoni(ś) cha vistare ।
Vasubhir guṇitaṁ bhānur(-nunā) hānyāyāmam ashṭa-śishṭakam ।
Ashṭābhir vardhite ṛikshaṁ(-sheṇa) hṛitvā śeshaṁ ksham ishyate ।
Navabhir vardhayet paṅktiḥ(-tyā) hṛitvā śeshaṁ vyayaṁ bhavet ।
Guṇa-nāgaṁ cha yoni(ḥ) syād vṛiddhi-hānyā-yathā-kramam ।
Nava-vṛiddhyā ṛishim(-shiṇā) hṛitvā tach-chheshaṁ vāram eva cha ।
Navabhir guṇite triṁśat-(ā) kshapech chheshaṁ tithir bhavet ।

(*M.*, ix, 63–73.)

The six formulas include ' aṁśa ' in the Saṁchita and Asaṁchita buildings, while in the Apasaṁchita ' tithi ' is included :

Vakshye'haṁ jāti-harmyāṇām āyādi-lakshaṇaṁ kramāt ।
Pūrvoktānāṁ vimānānāṁ vistārādi-vaśādibhiḥ ।
Āya-vyayaṁ cha yoniṁ cha nakshatraṁ vāram aṁśakam ।
Tithir vātha shaḍ etāni tathāyādi-vido viduḥ ।
Saṁchitāsaṁchitānāṁ cha aṁśair āyādibhir yutam ।
Apasaṁchita-harmyāṇaṁ tithy -antāni shaḍ grahīshyate ।

(*M.*, xxx, 169–174.

(It should be noticed, that the divisor in each case is the same in all the works under observation).

The names of all the different classes of formulas, such as Āya, Vyaya, Vāra, etc. represent well-known groups of objects that always follow a certain serial order. Āya represents the group of twelve beginning with Siddhi. Vyaya represents the group of ten beginning with śikhara. Ṛiksha represents the well-known group of twenty-seven planets. Yoni represents the group of eight animals, namely, Dhvaja, Dhūma, Siṁha, Śūna, Vṛisha, Gardhava, Dantin, and Kāka. Vāra represents the group of seven days of the week. Tithi represents the group of thirty lunar days comprising fourteen of the dark half, fourteen of the light half, new moon

[1]Also Rāsi, Gaṇa, Nayana (*M.*, ix, 88, 89, 90–93).

day and the full moon day. And Aṁśa represents the group of nine beginning with Taskara :

Siddhādi-dvā-daśāyaḥ syāch chhikharādi vyayāṁ daśa ।
Dhvajādim ashṭa yoni(ḥ) syāt taskarādi navāṁśakam ।
Prathamādi-tithir ity-evaṁ choktavad gaṇayet sudhiḥ ।
(*M.*, xxx, 188–190.)

Dhvaja-dhūma-siṁha-śūnaka-vṛisha-gardabhāś cha ।
Dantī cha kākaś cha vasu-yoni(ḥ) yathā-krameṇa ।
(*M.*, LII, 357–358.)

Tach-chheshaṁ chāpi nakshatraṁ gaṇayed aśvinī-kramāt ।
Śeshaṁ tad vāraṃ ity-uktam arka-vārādi-vāra-yuk ।
(*M.*, xxx, 183, 185; *see* context below.)

It should be noticed that the measurement of length is tested by the formulas under Āya and Ṛiksha, of breadth under Vyaya and Yoni, and of circumference or height under Vāra and Tithi.

It will be noted that the formula in each case consists of the product of the measurement to be considered and a certain other number divided by a figure which corresponds to the number constituting the group or series under which it is placed.

In each case, therefore, by resolving the formula, the remainder that may be left can be referred to that particular number in the series represents by that class, and if this happens to be one that under the conditions prevailing would be considered auspicious then the particular measurement would be acceptable, if not it would have to be rejected. For example, if in a particular instance $\frac{b\times 3}{8}$ coming under the class Yoni, the remainder left is two, it will point to the second Yoni Dhūma. If this Yoni is stated to be inauspicious, then the particular measurement of breadth cannot be approved. If again in the formula $\frac{c\times 9}{7}$ the remainder happens to be 4, it will indicate the 4th day (Wednesday) of the week, and if it be stated to be auspicious, the circumference (*c*) selected satisfies the test.

The auspicious and inauspicious remainders :

' When there is no remainder left in the formula of ' Āya ' it increases religious merits, and when there is no remainder left in the formula of " Vyaya " it is auspicious. There is no defect if the ' Āya ' be equal to " Vyaya " ' :

Āyaṁ sarva-haraṁ puṇyaṁ vyayaṁ śarva-haraṁ śubham ।
Āyādhikyaṁ vyayaṁ hīnaṁ sarva-saṁpat-karaṁ sadā ।
Yat-phalaṁ śubha-yuktaṁ ched āya-hīnaṁ tu dūshaṇam ।
Pūjyaṁ vyayaṁ samam evaṁ tatra dosho na vidyate ।
(*M.*, LXIV, 69–72.)

Āyaṁ sarva-haraṁ pūrṇam (? puṇyaṁ) vyayaṁ sarva-gatena hi ।
Āyādhikyaṁ vyayaṁ hīnaṁ sarva-saṁpat-karaṁ tathā ।
Āya-hīnaṁ vyayādhikyaṁ sarva-dosha-karaṁ bhavet ।
(*M.*, IX, 75–77.)

Śubhadaṁ pūrṇa-nakshatram aśubhaṁ karṇa-ṛikshakam ।
Yugmāyugmādya-turyaṁ shaḍ-ashṭa-nanda-śubharksha-yuk ।
Dvitīya-paryāyasyārdhe gaṇanaiś cha śubhāvaham ।
Sita-guru-śaśi-budha-vāram evaṁ śubhaṁ bhavet ।
(*M.*, IX, 78–81.)

Dhvaja-śiṁha-vṛisha-hastī syāt teshāṁ śubha yonayaḥ ।
Janma-dvayaṁ chatuḥ-shashṭibhir ashṭa-nanda-śubha-kshām ।
Nāma-janmādi-nandaṁ cha gaṇanais tu vidhīyate ।
(Kartṛi-rāśyādi-nāśyaṁ cha sena-dvitīyāntakam ।
Tṛitīye māna-j(y)akshādau pūrva-vad gaṇanais tu vā ।)
Tasmāt tṛitīya-paryantaṁ ṛikshaiḥ sarva-śubhāvaham ।
Guru-śukra-budhāś chandra-mukhya-vāram praśasyate ।
Taskaro dhana-shaṇḍaś cha preshṭānyān śubhāṁśakam ।
Varjyaṁ shashṭāshṭamaṁ rāśim anyat sarvaṁ śubhaṁ bhavet ।
Gajaḥ sarva-śubhaṁ proktaṁ mānushāsura(ṁ) varjayet ।
(*M.*, LXIV, 73–82.)

Gaja-yoniṁ vinā kuryāt siṁhāsanānyathā śubham ।
Āyādhikyaṁ vyayaṁ hīnaṁ sarva-saṁpach-chhubhāvaham ।
Āya-hīnaṁ vyayādhikyaṁ sarva-saṁpad vināśanam ।
(*M.*, LV, 81–83.)

Dhūma-yoniś cha kākāś cha gardhavān śuno varjayet ।
Anya-yoni-śubhaṁ sarve śubhāyān iha vojayet ।
(*M.*, LV, 81, 84–85.)

Dhvaja-siṁha-hasti-vṛisha-yoni(ḥ) śubhaṁ praśastam ।
Anyeshu yonir aśubham uditaṁ purāṇaiḥ ।
(*M.*, LII, 359–360.)

There are other rules as well, e.g. where Āya, etc. are considered with regard to height in the Jāti class, and with regard to length in the other classes of buildings.

Again Āya, etc. are considered with regard to breadth :

Jāti-dvārodaye sarve chāyādi-saṁgrahaṁ bhavet ।
Chhandādīnāṁ tu sarveshāṁ tāre chāyādi-saṁgraham ।
Vṛiddhi-hānyādi-sarveshāṁ prāsādasyoktavad bhavet ।
(*M.*, XXXIX, 39–41.)

Vistāre chatur-aṅge vā shaṭ-śubhāyādi kārayet ।
(*M.*, LV, 72.)

The formulas also vary on different occasions :

Tri-chatuḥ-pañcha-shaṭ-vṛidhyā chāshṭa-hāniś cha yonayaḥ ।
Shaṭ-saptāshṭaka-vṛiddhyā tu dvādaśa kshapayet budhaḥ ।
Śesham āyam iti proktaṁ saptāshṭa-nava-vardhanāt ।
Daśabhiḥ kshapayech chhesham evaṁ vyayam udīritam ।
Ashṭa-nanda-daśe vṛiddhyā sapta-viṁśe kshayo bhavet ।
Śeshaṁ dinam iti proktaṁ vṛiddhāshṭa-nandanādhikā ।
Saptaika-chandrage śeshaṁ vāram evam udīritam ।
Tri-chatush-pañcha-vṛiddhyā tu kshapayet tu navāṁśakam ।

(*M.*, LV, 73–80.)

Etat tad eva saṁyuktaṁ harmyāṇāṁ māna-kalpanam ।
Shaṭ-saptāshṭaka-vṛiddhiḥ syād dvā-daśāntaṁ kshayaṁ nyayet ।
Śeshaṁ tad āyam ity-uktaṁ saṁchitādi-yathā-kramam ।
Saptāshṭa-nava-vṛiddhyā tu haret paṅktyā vyayaṁ bhavet ।
Eka-dvi-traya-vṛiddhyā tu kshapayet tv-ashṭā cha yonikam ।
Shaṭ-saptāshṭa-vṛiddhyā tu sapta-viṁśa-kshayo bhavet ।
Tach-chheshaṁ chāpi nakshatraṁ gaṇayed aśvinī-kramāt ।
Shashṭa-nanda-vṛiddhyā tu saptabhiḥ kshapayet tataḥ ।
Śeshaṁ tad vāram ity-uktam arka-vārādi-vāra-yuk ।
Tribhir vedās tu vṛiddhiḥ syān nanda-hāni-navāṁśakam ।
Tithi-randhroshṇa-vṛiddhiḥ syāt triṁśatā tu kshayo bhavet ।

(*M.*, XXX, 177–187.

Daighye liṅgasyāyādi-shad-varga-śuddhiṁ kuryāt sarvathoktavat ।
Mānaliṅge chānya-svāyambhuvādi-manaṁ cha yuktaṁ thatā-yādīni sarvaṁ na kuryāt ।
Bandhāshṭa-nanda-vasu-nanda-yugena vṛiddhyā ।
Chāshṭārka-paṅkti-turagair munibhir nanda-hanyāt ।
Yonayaś cha vṛiddhir vyayaṁ cha tu vāram aṁśam ।
Liṅgaikena kuryāt tu parārtha-liṅge ।

(*M.*, LII, 349–354.)

Application of the rules :

'They are applied in measuring both the architectural and the sculptural objects.'

These rules are considered in connexion with the measurement of villages and towns (*M.*, IX, 67–74), of the twelve-storeyed buildings (XXX, 164–174), and of the phallus (LII, 350–356).

Cf. also :

Āyādi-shaḍ-varga-(ḥ) surair (=surāṇāṁ) vimāne ।
Chāyādhikaṁ kshīṇa-vyayaṁ śubhaṁ syāt ।

Grāmādi-kartṛi-nṛipatika-kriyāṇām ।
Sarvaṁ śubhaṁ tat kurute tu vidvān ।

(*M.*, xxx, 192–195.)

The necessity of these Shaḍ-varga formulas seems due to the fact that in most instances where the measurement of any object is concerned, the *Āgamas*, the *Bimbamāna*, the *Mānasāra* and the other works on architecture quote more dimensions than one. Thus for the length that an object is to be of, they instead of giving a single figure would quote, say, nine different measures. The *Mānasāra* in fact invariably gives nine different lengths, nine different breadths, and five heights concerning a building or image. Out of these different and varying measures which is to be selected would be determined by the application of the six formulas. Any of the different measures prescribed is open to be accepted only when it satisfies the tests of the Shaḍ-varga. By a verification of the measurements with the respective formula it would eliminate the risk of dimensions being selected that would be disproportionate among themselves and improper. This might have been the purpose that the authorities had in contemplation in prescribing the rules of the Āyādi Shaḍ-varga in all the architectural treatises. The testing of measurements by the Shaḍ-varga thus formed one of the most important points to be followed in architecture and sculpture, and we find a reference to it in these ancient works so many times and almost without exception wherever there are any specifications prescribed.

(2) *Bimbamāna* (British Museum, MS. no. 558, 5292, vv. 10, 11–13)

Mānaṁ tu yoni-nakshatra-saṁyuktam ॥
Āyāmāshṭa-guṇite cha dvā-daśāṁśe'ti śeshatā ।
Nandāṁśe tu guṇite'pi dharmāṁśe'ti vyayaṁ bhavet ॥
Yonir guṇibhir guṇitau(-tā) chāshṭāṁśe 'pi tathaiva cha ।
Ṛikshakam ashṭa-guṇitaṁ cha sapta-viṁśati-śeshataḥ ॥
Vārakaṁ nava-guṇitaṁ cha saptāṁśe tu hṛitaṁ bhavet ।
Aṁśakaṁ chābdhi-guṇite'pi nava-bhāga-hṛitaṁ matam ॥

(3) *Kāmikāgama* (xxxvi, 13–20, 169–172) :

Āyādi-saṁpad-arthaṁ tu vistāre chāyatau tathā ।
Utsedhe chaiva hastānāṁ samyak saṁpūrṇatāṁ nayet ॥ (13)
Vistārāt kevalaṁ vātha vāyāmād unnates tathā ।
Vistārāyāma-saṁsargād āyādyaṁ parigṛihyatām ॥ (14)
Ashṭa-tri-tri-ashṭabhir hṛitvāshṭa-manvarka-bhair bhajet ।
Āyo vyayaś cha yoniś cha nakshatraṁ śeshato bhavet ॥ (15)
Triṁśad āpnuta paryantaṁ tithir vāṇaṁ tu saptabhiḥ ।
'Athavānya-prakāreṇa chāyādyaṁ parigṛihyatām ।

Dvayor bhyāṁ dvayārdhasya vistāraṁ dvayārdhaṁ nāhaṁtu nāhakam ॥ (16)
Ashṭa-nandāgni-vasubhir gaṇayen nanda-nanda-nāha ।
Arka-dig-vasu-bhāḥ-sapta-navabhiś cha kramād bhajet ॥ (17)
Āyādhyaṁ pūrva-vat proktam āyādhikaṁ śubha-pradam ।
Yajamānasya yanmārkshe nānukūlaṁ yathā bhavet ॥ (18)
Tathā parīkshya kartavyaṁ nāma nakshatrakaṁ tu vā ।
Parīkshya bahudhā kuryād ubhayaṁ vā parīkshayet ॥ (19)
Sarvānukūlyaṁ sarvatra vāstu yasmān na labhyate ।
Tasmād guṇādhikaṁ grāhyam alpa-doshaṁ yathā bhavet ॥ (20)
Eka-tri-pañcha-saptāṁśe dhvaja-siṁha-vṛisha-dvipāḥ ।
Pūrvād yāsu śubhā hy-ete āyādyas tv-anulobhataḥ ॥ (169)
Dvi-chatuḥ-shaḍ-vasu-sthānaṁ dhūma-śva-khara-vāyasāḥ ।
Āgneyādi vidikshv-ete varjanīyā bubhukshubhiḥ ॥ (170)

and so on.

See also *Kāmikāgama.*, Chap. L :

Evam ādau parīkshyaiva prāsādaṁ parikalpayet ।
Eteshām api sarveshām āyādi-vidhir uchyate ॥ (57)

Various rules are again given :

Vistāraṁ dvi-guṇaṁ kṛitvā vasubhir bhājite sati ।
Śishṭaṁ yonir iha proktā tad-abhāve tu śaudhakaḥ ॥ (58)
Udaye vasubhiḥ-sapta-viṁśadbhir bham ihoditam ।
Paridhau nanda-guṇite sapta-bhur dvāram uchyate ॥ (59)
Sakalaṁ tri-guṇaṁ kṛitvā triṁśadbhir bhājitvā ।
Tithi-udayaṁ vasubhir bhaktvā sūryāyas(-yais) tu śeshataḥ ॥ (60)
Punar apy udayaṁ nanda-vasubhir vyayaḥ uchyate ।
Pādādhikaṁ tu yat śishṭaṁ tat sarvaṁ sakalaṁ bhavet ॥ (61)
Pūrva-vad guṇitaṁ kṛitvā bhāgaṁ(?) bhāraṁ samaṁ kṛitvā ।
Tenaiva vibhajed yal-lābhād adhikaṁ bhavet ॥ (62)
Yugma-hastaiḥ svarodbhūtaiḥ śikhibhir yonir uchyate ।
Athavānya-prakāreṇa āyādi-vidhir uchyate ॥ (63)
Nāge sūtrāgni-randhra-bhuvana-daśa-vasvābdhi-śishṭas tu ।
Tat syād āyo na yonir vāraṁ vasu-hataṁ udubhir (?) bhaktvā ॥ (64)
Śishṭaṁ tu ṛikshaṁ hatvā bhaktvātha sūtrair bhuvanam ।
Atha phalaṁ śishṭam aṁśaṁ vasughnaṁ triṁśad bhaktam ॥ (65)
Tithiḥ syād graha-dina-tithi-yogādayo yoni-bhedāḥ ।
Athavānya-prakāreṇa chāyādīn parikalpayet ॥ (66)
Nāga-nanda-guṇa-nāga-nanda-dṛik-bhānu-nāḍī-vasu-bhaṁ munir vā ।
Āyam anyatra yoni-ṛikshakaṁ vāram aṁśaka-guṇa-kshayakramāt ॥ (67)

Application of the rules :

Idaṁ liṅge cha sakale dvāre stambhādike matam ।
Idam āyādikaṁ chārdha-maṇḍape śishṭa-maṇḍape ॥ (68)
Parivārālaye tuṅga-harmye anyasmin prakalpayet ।
Evaṁ parīkshya bahudhā prāsādaṁ parikalpayet ॥ (69)

Kāmikāgama, LV, 28–30 :

Mānaṁ labdhodayaṁ yat syāt bhaktvā mātrayor viśeshataḥ ।
Parihṛityāṅguli-chchhedyam āyādyaṁ parikalpayet ॥ (28)
Ashṭa-nandāgnibhiś chaiva vasu-nandā cha chatushṭayair hi ।
Guṇatvara-vidhi-mūrti-ṛiksha-sapta-navāṁśakair hi ॥ (29)
Hṛityam āyaṁ vyayaṁ chaiva yonis tāras tu vārakaḥ ।
Aṁśakā chāvaśishṭās tu kalpanīyās tu deśikaiḥ ॥ (30)

Ibid., XXXV, 21 (refers to six component parts of a building) :

Adhishṭhānaṁ cha pādaṁ cha prastaraṁ karṇam eva cha ।
Śikharaṁ stūpikā chaiva śālāṅgam iti kathyate ॥ (21)

These are called Shaḍ-varga : *cf.* XLV, v. 8 (under Puṁliṅga), v. 15, (under Drāviḍa), v. 10 (under Strīliṅga), and v. 11 (under Napuṁsaka).

(4) Laghu-śilpa-jyotiḥ-sāra (ed. Śivarāma, I, 3–5) :

Āyo rāśiś cha nakshatraṁ vyayas tārāṁśakās tathā ।
Graha-maitrī rāśi-maitrī nāḍi-vedha-gaṇendavaḥ ॥
Ādhipatyaṁ vāra-lagne tithy-utpattis tathaiva cha ।
Ādhipatyaṁ varga-vairaṁ tathaiva yoni-vairakam ॥
Ṛiksha-vairaṁ sthitir nāśo lakshaṇāny-eka-viṁśatiḥ ।
Kathitāni muni-śreshṭhaiḥ śilpa-bi(vi)dbhir gṛihādishu ॥

(5) *Manushyalaya-chandrikā* (Chap. III, 33.) :

The same formulas are described in various ways. *See Six Canons of Indian Architecture*, by V. K. R. Menon, referred to elsewhere in this article.

These Shaḍ-varga formulas are rules which are not easily grasped in the abstract form. They, however, need not be neglected if we are incapable of interpreting them correctly. While quoting a few extracts on this subject from a Tamil version of the Myen (? Mayamata) Rev. J. F. Kearns, Missionary, Tanjore, lost his temper and priestly patience and has recorded the following :

'Strange as all this appears to us Europeans, natives regard these things as matters of great importance.'—(*Ind. Ant.*, Vol. V, p. 296, c. 1, last para.).

I fear whether the learned missionary understood the importance of the matters correctly. We may, however, compare in the absence of the Tamil text his translation (*ibid.*, p. 295–296) :

'Ascertain the length of the house, square it, multiply the sum by 8, and divide the product by 12, the remainder is the Ādāyam or profit (Āya). Again, take the square number and multiply it by 9, divide the product by 10, the remainder is the Selavu or loss (i.e., Vyaya). Again, take the square number and multiply it by 27, and divide the product by 100, the remainder is the age or durability of the house. Again, take the square number, multiply it by 8, and divide the product by 27, the remainder is the star (i.e. Ṛiksha). Again, multiply the square number by 3, and divide the product by 8, the remainder is the Yoni. Multiply the square number by 9, and divide the product by 7, the remainder is the day (i.e. Vāra). Multiply the square number by 9, and divide the product by 4, the remainder is the caste. Multiply the square number by 4, and divide the product by 9, the remainder is the Aṁsam. Multiply the square number by 9, and divide the product by 30, the remainder is the Tithi.'

'If this falls within 15, it belongs to the crescent moon, but if above 15 to the decrescent moon. Again, multiply the square number by 4, and divide the product by 12, the remainder is the constellation. Multiply the square number by 8, and divide the product by 5, the remainder gives the Sūtra. The following are the Yonis: Garuḍa (Punaī), Siṁha, Noy, Pāmbu, Eli, Aṇi, Muśl; of these (Punai) (cat), Eli (rat), and Muśl (hare) are bad. The following are the Aṁśams: Arsam, Soram, Putthi, Satthi, Thanium, Rāsium, Kalibam, Varuttham, Rokam, and Subām. The following are the Sūtras: Bālan, Kumāran, Rājan, Kilavan, Marnan.'

The following examples are given to illustrate the foregoing:

'Given the length of the house 11 cubits, and the width 5 cubits, to find the age,—that is to say, how many years such a house will stand. By the rule 11—5—55, and 55—27—1485, 1485—100—14, the remainder being 85,—which remainder indicated the number of years the house will stand.'

'Given the length of a house 15 cubits, and the width 7 cubits, to find the caste for whom it is suitable, 15—7—105, 105—9—945, and 945—4—236, remainder 1. The remainder 1 indicates the first caste, i.e. Brāhmans.'

'Given the length of the house 17 cubits, and the width 7, to ascertain the caste for whom it is suitable, 17—7—119, 119—9—1071, and 1071—4—267, remainder 3. The remainder 3 denotes the third or Vaiśya caste.'

'The next example exhibits the entire series. Given the length of the house 9 cubits, width 3 cubits, to find the (Ādāyam) and Śelavu, etc., etc. By the rule 9—3—27, 27—8—216, and 216—12—18,—12—(Ādāyam) 27—9—243, and 243—10—24, remainder 3,—which is the Śelavu or loss,

and so on according to the rule. The Yonī is Garuḍa, the star Revatī, the part of the lunar month the third day, the day of the week Thursday, the constellation Pisces, and the caste Vaiśya.'

Mr. V. K. R. Menon, M.SC. (London), intended to give a more rational and scientific explanation of these formulas in a pamphlet 'Six Canons of Indian Architecture.' But his endeavour has more or less failed owing to too many assumptions. The 'Architectural Significance' can hardly be explained by a reference to Astrological importance: an unknown matter cannot be understood by referring to an equally unknown thing. 'Some at least of these formulae,' says Mr. Menon, 'have a very great architectural significance' and he 'hopes' to show that 'all of them can be explained in a simple manner with reference to Astrology.' 'When we realize,' continues Mr. Menon, 'that in the symbolic language of the *Śilpa-śastras* the newly-erected edifice represents not only a human being, but also a bridegroom, joined in holy wedlock to the plot of earth on which it is erected, we can sympathize with the strict injunctions to avoid the fifth (of life, death) at all costs, and to choose the second (youth) whenever possible. This picturesque identification of the structure with a human being must have given rise to the last five formulae of the Āyāda Shaḍ-varga' (pp. 5–6). It is true, however, 'that they (the application of these formulae) occasionally prove troublesome when planning small houses and villas; but they do put a stop to the addition of disproportionately large verandahs to puny structure.' But he gives up curiously this architectural ground when he says that the 'satisfaction of conforming to the religion of one's motherland, should amply recompensate for such minor restrictions' (p. 7). He further imagines that these formulae have something to do with the orientation of buildings (which subject has been treated under ŚAṄKU in the *Mānasāra*) and emphatically says that 'this formula (on Yoni)—if my deductions are correct—is a purely architectural device compelling the sthapati (architect) to orient his structures properly.' He illustrates his doubtful assumption with an inaccurate reference when he says that 'All the temples, palaces, cities, villages and important roads of ancient India exactly faced the four primary points of the compass (N., S., E., and W.).' He comments thus: 'This is as it should be, for it places the Indian ideal in tune with the ideals of every other ancient nations.' His reference to examples of other countries are more accurate: 'The Egyptian pyramids faced exactly north. The Theban obelisks faced the rising sun.' The Palace of Sennacherib, the Tabernacle of the Jews, the temple of Solomon, the church at Bethlehem, the Holy Sepulchre of Christ at Jerusalem: all these satisfy the first formula (on Yoni) of Āyādi Shaḍ-varga' (p. 9). The Indian monuments face other than these four cardinal points also.

SHOḌAŚA-PRATIMĀ—The sixteen images, a group of sixteen deities.

Cf. Purato'sya shoḍaśānāṁ vara-gaṇikānāṁ dvi-bhūmikagṛihāṇi āli-dvayena—'in front of the temple he erected two rows of double-storeyed houses for sixteen female attendants.'

(Chebrolu inscrip. of Jaya, v. 46, *Ep. Ind.*, Vol. VI, pp. 40, 93.) (*See* under Raja-harmya.)

SHOḌAŚĀŚ(-S)RA—A type of building which has sixteen-angular shape, one storey and one cupola.

(1) *Bṛihat-saṁhitā* (LVI, 28, *J. R. A. S.*, N. S., Vol. VI, p. 320, note 1 ; *see* under PRĀSĀDA).

(2) *Matsya-Purāṇa* (Chap. CCLXIX, vv. 29, 53 ; *see* under PRĀSĀDA).

(3) *Bhavishya-Purāṇa* (Chap. CXXX, v. 25 ; *see* under PRĀSĀDA).

S

SAKALA—A site plan, an idol, a group of images of four deities including Iśvara.

(1) A site plan (*M.*, VII, 2, 51, 73 ; XII, 64 ; *see* PADA-VINYĀSA).

(2) An image or idol (*M.*, LXIV, 48).

(3) *Suprabhedāgama* (XXXIV, named Sakala-lakshaṇa-vidhi, 1, 2) :

Athātaḥ saṁpravakshyāmi sakalānāṁ tu lakshaṇam ।
Sarvāvayava-dṛiśyatvāt pratimā tv-iti chochyate ॥
Iśvarādi-chatur mūrttiḥ paṭhyate sakalaṁ tv-iti ॥

SAKALĪKARAṆA—The ceremony of making a joint offering of all things (with which a deity is worshipped), which generally consist of eight kinds of grains such as sesamum, barley, rice, etc., sandal paste, clarified butter, sugar and honey, etc.

SATĪ-MAṆḌAPA—A kind of pavilion where perhaps certain ceremonies used to be performed in connexion with the obsolete practice of burning alive a devoted wife with her dead husband, the temple of the goddess Satī who was the wife of Śiva and a daughter of Daksha.

Arbhakānāṁ mukhālokaṁ maṇḍapam satī-maṇḍapam ।

(*M.*, XXXIV, 41.)

SATYA-KĀNTA—A class of eight-storeyed buildings.

(*M.*, XLVI, 43–45 ; *see* under PRĀSĀDA.)

SATRA(-TTRA) (*cf.* CHHATRA, CHHATRI)—An alms-house, the modern dharma-śālā, a rest-house, a residence.

(1) Alms-house (Dewal Praśasti of Lalla the Chhinda, v. 20, *Ep. Ind.*, Vol. I, pp. 79, 83).

(2) Hall of charity (stone inscrip.. at Vaghli in Kandesh, no. C, lines 4, 12, *Ep. Ind.*, Vol. II, p. 226, 227).

(3) *See* Śrīdhara's Devapattana Praśasti (verse 10, *Ep. Ind.*, Vol. II, p. 440).

(4) Rest-house (Nilgund inscrip. of Taila II, line 30, *Ep. Ind.*, Vol. IV, pp. 207, 208).

(5) Chitrais satrālyair yyasya pṛithivyāṁ prathitha-yaśasaḥ I
Bubhukshu-bhikshu-saṁghāta-prabhūta-prīti-hetubhiḥ II
(Two pillar inscrip. at Amaravati, no. A, of Keta, II, v. 40, *Ep. Ind.*, Vol. VI, p. 152.)

(6) A feeding establishment :
Deva-bhogārthaṁ cha deva-kulebhyaḥ khaṇḍa-sphuṭitādi-nimittaṁ gandha-dhūpa-pushpa-dīpa-naivedādy-upachārārthaṁ tapovana-sattrottarāsaṅga-dānādy-arthaṁ cha . . . I
(Cambay plates of Govinda IV, line 48, *Ep. Ind.*, Vol. VII, pp. 40–45.)

(7) Bilvapadrake parikalpita-sattra-bhoktṛīṇāṁ yathā-prāpta-brāhmaṇādi-janānāṁ triṁśataḥ pratyaham upabhogāya . . . 'In order to feed daily thirty Brāhmaṇas or other men who happen to arrive (and) who use the rest-house established at Bilvapadraka.'—(Baloda plates of Tivaradeva, lines 26–27, *Ep. Ind.*, Vol. VII, pp. 105, 107.)

(8) A charitable dining-hall of a temple :
Śrī-sarvva-lokāśraya-jina-bhavana-khyāta-satrārttham—'for the purpose of the renowned dining-hall of the holy and famous Jain temple called Sarvalokāśraya-Jina-bhavana.'—(Kaluchumbarru Grant of Amma II, line 60, *Ep. Ind.*, Vol. VII, pp. 188, 191, 179.)

(9) Khaṇḍa-shpuṭa-vava-kṛityopili-prapūjādi-sattra-siddhyartham I
'For the cost of repairs of breaks and cracks, offerings, worship, etc., and of an alm-house.'—(Maliyapundi Grant of Ammaraja II, line 54, *Ep. Ind.*, Vol. IX, pp. 54, 56.)

(10) Drākshārāme pāvane puṇya-bhājā puṇya-kshetre Pīṭhapuryyāṁ cha yena I
Bhoktuṁ prītyā pratyahaṁ brāmhaṇānām ākalpāṁttaṁk alpitaṁ sattra-yugmam II
'At holy-Drākshārāma and at the sacred place of Pīṭhapuri, this charitable one joyfully founded two sattras for Brāmhaṇas, in

order that they might daily enjoy their meals (there) till the end of the Kalpa.'—(Eastern Chalukya Grants, no. 39, a Grant of Vira-Choda, v. 33, *H. S. I. I.*, Vol. I, pp. 56, 61 ; *see also* quotation no. 16 below.)

(11) ' The hiraṇya-garbha, brahmāṇḍa, and all the other great gifts prescribed in the *Śāstras* had he made,—wells, ponds, tanks, with satras from road to road, had he established—and temples of the gods he had made.'—(*Ep. Carnat.*, Vol. XII, Kunigal Taluq, no. 37; Transl., p. 38, para. 3.)

(12) ' Having allotted to the avasara-satra of the god śrī-hari-haradeva two shares of the village . . . '

' Satra—oblation, charity, asylum or alms-house, charitable dining hall ; " avasara-satra " seems to mean an occasional satra.' Dr. Fleet.

But ' rest-house ' as opposed to both resting and dining-hall would perhaps give better meaning.

(Sanskrit and Old Canarese inscrip. no. VI, *Ind. Ant.*, Vol. IV, p. 329, c. I, line 3 f., and footnote.)

(13) Sa prāsādām achīkarad divishadāṁ Kedāra-devasya cha khyā-tasyottara-mānasasya khananaṁ sattraṁ tathā chākshaye I

' He caused to be built a temple of the inhabitants of heaven called . . . and of the god Kedāra ; he likewise had the famous Uttara-mānasa (tank) dug, and (established) a hall of charity, to last for ever.'—(Gaya inscrip. of Yakshapala, v. 12, *Ind. Ant.*, Vol. XVI, pp. 65, 66.)

(14) ' A grant of land for a satra for feeding twelve Brāhmans in front of the maṭha on the bank of the Tungabhadra.'—(*Ep. Carnat.*, Vol. VI, Koppa Taluq, no. 32 ; Transl., p. 81 ; Roman Text, p. 176–177.)

(15) He halting at Mārasinga's Behūr, constructed there the Biruda-sarvvajña-gaṭṭa and other tanks ; and to provide a satra for food for the students in the maṭha of the god Mallikārjuna there . . . made a grant of land.'—(*Ep. Carnat.*, Vol. VII, Shikarpur Taluq, no. 19; Transl., p. 43 ; Roman Text, p. 98.)

(16) Drākshārāme pāvane puṇya-bhājā puṇya-kshetre Pīṭhapuryyāṁ cha yena . . . kalpitaṁ sattra-yugam (*cf.* no. 10 above).

' At the pure Drākshārāma and at Pīṭhapurī, a place of sanctity, he established two sattras.'—(Chellur Grant of Vira-Choladeva, lines 97–98, *Ind. Ant.*, Vol. XIX, pp. 432, 436.)

ŚATTAṄGA (same as ŚATĀṄGA)—An arm-chair, sofa, sofa with arm to it.)

(*Mahāvagga*, v. 10, 2.)

SATRA-MAṆḌAPA—A type of pavilion, the alms-house of a temple.

Vāpi-nirgamane yena pūrvataḥ satra-manḍapam ।

(*Garuḍa-Purāṇa*, Chap. XLVI, v. 14.)

SATRĀVĀSA-MAṬHA—A monastery, a free rest-house.

Chatushkoṇe tapasvināṁ satrāvāsa-maṭhaṁ bhavet ।

(*M.*, XXXII, 89.)

SADANA—A temple, a seat, a sacrificial hall, a house, a mansion, a palace, the abode of the god of death (Yama).

(1) A temple (Dabhoi inscrip. v. III, *Ep. Ind.*, Vol. I, p. 31).

(2) Sura-sadana (Dewal Praśasti of Lalla, v. 20, *Ep. Ind.*, Vol. I, p. 79).

(3) Sadanaṁ atula-nāthasyoddhṛitaṁ yena jīrṇṇaṁ ।

'By whom the (old) temple of Atula-nātha was repaired.'

(An Abu inscrip. of the reign of Bhimadeva II, v. 10, *Ind. Ant.*, Vol. XI, pp. 221, 222.)

(4) Sārasvataṁ krīḍā-ketanam etad atra vidadhe ।

Sārasvataṁ sadanam akshayam etad astu ।

(Sanskrit Grants and inscrip. no. I, vv. 33, 34, *Ind. Ant.*, Vol. XI, pp. 103, 106.)

SADAS—A seat probably raised for sadasya or councillors at a sacrifice.

(*Śat. Brā.*, X, 4, 2, 9.)

SADĀŚIVA—A class of four-storeyed buildings.

(*M.*, XXII, 25–33 ; *see* under PRĀSĀDA.)

SADMAN—A temple, a seat, an altar, an abode, a dwelling, a house.

Chakre nava-niviḍa-viśāle sadmani Śūlapāneḥ—'built a new solid large temple of Śūla-pāṇi.'

Śambhoḥ sadamani stambha-mālāṁ . . . vyātatāna—'erected a row of pillars in the temple of Śambhu.'—(An Abu inscrip. of the reign of Bhimadeva II, vv. 10, 12, *Ind. Ant.*, Vol. XI, pp. 221, 222.)

SANDHI—A joint, a connexion, a combination, a junction.

Eka-śālānu-sandhiś cha dvi-śālā chaika-sandhikam ।

Tri-śālā cha dvi-sandhiḥ syāch chatuḥ-sandhis chatur-mukham ।

Shaṭ-sandhiḥ sapta-sālā cha bahu-sandhi(r) daśālayam ।

(*M.*, XXXV, 73–74.)

SANDHI-KARMAN—The joinery, the framing or joining of wood for the internal and external finishings of houses ; thus the covering and lining of rough walls, the covering of rough timbers, the manufacture of doors, shutters, sashes, stairs, and the like, are classed under the head of joinery.

(*See* Gwilt, *Encycl. of Arch.*, p. 1214.)

Mānasāra (Chap. XVII, 2–225), named Sandhi-karman :

The definition :

Harmyāṇāṁ dāru-saṁyogaṁ sandhi-karma (m)udīritam । (2).

Various kinds of joinery are described under the following names :

Malla made with two pieces of wood, Brahma-rāja with three or four pieces, Veṇu-parvan with five pieces, Pūga-parvan with six pieces, Deva with seven pieces, Parvan with eight pieces, and Daṇḍa with more than eight pieces of wood and other materials (line 18 f.).

Forms of the joinery are described under the titles Nandyāvarta and Svastika (lines 59–60), etc., *see* details (lines 18–58, 61–225).

SANDHI-BANDHA—A bond of union, a material that makes two bodies stick together, cement, mortar.

Saṁsthāpyāpi na tasya tushṭir abhavad, yāvad Bhavāni-gṛihaṁ suślishṭāmala-sandhi-bandha-ghaṭitaṁ ghaṇṭā-ninādojjvalam ।

'Not satisfied with the erection (of this image only, the pious man) caused to be built a shrine of Bhavānī, which was joined with a very adhesive and bright cement, resplendent with the sounds of bells.'

(Benares inscrip. of Pantha, v. 5, *Ep. Ind.*, Vol. IX, pp. 61–62.)

SAPTA-TALA (*see* TALA)—The seventh storey, seven-storeyed buildings.

Etat sapta-talaṁ proktaṁ rājñām āvāsa-jogyaklam ।

(*Kāmikāgama*, XXXV, 84.)

The seven-storeyed buildings are described in a separate chapter in the *Mānasāra.*

Description of the seventh storey (*M.*, XXV, 2–23, 32–39), the eight classes (*ibid.*, 3–31), *see* under PRĀSĀDA.

SAPTA-TĀLA (*see* TĀLA-MĀNA)—A system of measurement in accordance with which the whole body is seven times the face inclusive of head.

(*Śukranīti*, Chap. IV, sect. IV, ed. Jivananda Vidyāsāgara, p. 359 ; *see* details under TĀLA.)

SAPTA-BHŪMI-(KA) (*see* SAPTA-TALA)—The seventh storey, seven-storeyed buildings.

Rāja-kanyām . . . sapta-bhūmika-prāsāda-prānta-gatām ।

(*Pañchatantra*, ed. Bombay, I, p. 38.)

SAPTA-SĀLĀ—A seven-fold wall.

Madhya-sūtraṁ tu vāme tu harmya-dvāraṁ prakalpayet ।
Tad-bahiḥ parito-deśe sapta-sālāṁ prakalpayet ।
Narāvāsārtha-rathyā cha prākāra-dvaya-maṇḍitam ।

(*M.*, XXXI, 81–83.)

SABHĀ—A type of building, an edifice, a public hall, an assembly room, a council chamber, a society room in a private dwelling house. (*A.-V.*, XIX, 55, 6 ; *Taitt. Sam.*, III, 4, 8, 6 , *Taitt. Brā.*, I, I, 10, 3 ; *Chhānd-Upanishad*, VIII, 14). The special features in Vedic times were their pillars and fire-altars. There must have been suitable structural arrangements for the transaction of judicial, commercial and political business, and for the reception of ' courtly ' well-born wealthy persons and kings, and for the performance of gambling, merriment, social intercourse, debates and contests (*Vedic India*, Vol. II, p. 426–427).

(1) A class of buildings :

Prāsāda-maṇḍapaṁ chaiva sabhā-śālā-prapāṁ tathā ।
(A) raṅgam iti chaitāni harmyam uktaṁ purātanaiḥ ।

(*M.*, III, 7–8.)

Śikhare chāvṛite'pare sabhā-maṇḍapa-gopure ।

(*M.*, XVIII, 200.)

A public hall :

Maṇḍapaṁ sabhāṁ vāpi grāma-yogyaṁ yathā-diśi ।
Nagare cha yathākāraṁ dvi-guṇātyarthakāyatam ।

(*M.*, XXXIV, 562–563.)

Bhūdhare chāsure vapi sabhā-sthānaṁ prakalpayet ।

(*M.*, VIII, 34.)

(2) A council chamber :

Tato vichintya manasā loka-nāthaḥ Prajāpatiḥ ।
Chodayamāsa tvaṁ kṛishṇaḥ sabhā vai kriyatām iti ॥
Yadi tvaṁ kartukāmo'si priyaṁ śilpa-vatāṁ vara ।
Dharmma-rājasya daiteya yādṛiśīm iha manyase ॥
Yāṁ kṛitāṁ nānukurvanti mānavāḥ prekshyādhiṣṭhitāḥ ।
Manushya-loke sakale tādṛiśīṁ kuru vai sabhām ॥

Yatra divyān abhiprāyān paśyema hi kṛitāṁs tvayā ।
Āsurān mānushāṁś chaiva sabhāṁ tāṁ kuru vai Maya ॥
Pratigṛihya tu tad vākyaṁ saṁprahrishṭo Mayas tadā ।
Vīmāna-pratimāṁ chakre Pāṇḍavasya śubhāṁ sabhām ॥

The penultimate verse is explained by the commentator Nīlakaṇṭha :

Āsurān mānushān ity upalakshaṇaṁ deva-gaṁdharvādīnām apy abhiprāyān lepa-chitre lekhya-chitre cha chaturdaśa-bhuvanāṁtarastha-tat-taj-jātīya-svābhāvika-nānā-vidha-lilā-pradarśanena manovṛittih paśyema yad-darśanena brahmāṁḍāṁtara-vartisarvaṁ vastu-jātaṁ drishṭa-prāyaṁ bhavatīty arthaḥ ।

(*Mahābhārata*, Sabhā-parvan, Chap. I, vv. 9–13.)

See also the description of the Indra-sabhā (*ibid.*, Chap. VII), Yama-sabhā (Chap. VIII), Varuṇa-sabhā (Chap. IX), Kubera-sabhā (Chap. X), and Brahma-sabhā (Chap. XI).

Sabhā . . . divyā hema-mayair uchchaiḥ prāsādair upaśobhitā ।

(*Ibid.*, II, 10, 3.)

(3) Chatur-bhāga-dvi-bhāgena pṛishṭhāvāsa-sabhāṁ nayet ॥
Agra kūṭa-dvayor madhye śālāḥ pṛishṭha-sabhā-yathā ॥
Pṛishṭhāvāsa-sabhā tad-vad anyat sarvaṁ adhas-tale ॥

(*Kāmikāgama*, XXXV, 73, 74, 76.)

Definition :

Mūla-kūṭa -samāyuktā vāṇa-kūṭa -samanvitā ॥
Kachchha (=keśa)-gṛiha-samākuktā sabheti parikīrtitā ॥

(*Ibid.*, XXXV, 4, 95.)

Brahma-sthāne sabhādīni kalpayed vidhinā budhaḥ ॥

(*Ibid.*, XXVIII, 15.)

(4) 'Mārtaṇḍa-varmā, the king of Keraḷa, desirous of extensive prosperity, fame and long life, built the sabhā of Śambhu (Śiva) a Śuchīndram.'

Sthāne māni-śuchīndre samakuruta sabhāṁ Kerala-kshmā-patīndraḥ ।—(Inscrip. in the Pagodas of Tirukurunguḍi, in Tinnevelly, and of Śuchīndram in South Travancore, *Ind. Ant.*, Vol. II, p. 361, c. 2 ; v. 1, p. 362, para 1.)

(5) 'The word (Sabhā) denotes also (i.e. other than a regular assembly or meeting) a 'hall' or a 'house.' Dr. Bhandarkar.—(*Ind. Ant.*, Vol. XII, p. 145, c. 2, line 9 f.)

(6) Śrī-raṁga-kāñchana-sabhā yathā-puram abhāsayat ।

'The regilded (central shrine of the temple at) Śrīraṁgam and the golden hall (at Chidambaram).'—(Ariyur Plates of Virupaksha, lines 21–22, *Ind. Ant.*, Vol. XXXVIII, pp. 14, 12 ; para 4, line 6).

SABHĀ-MĀLIKĀ—A class of buildings.

(*Kāmikāgama*, XLV ; *see* under MĀLIKĀ.)

SAMA (*see* SAMUDGA) A type of rectangular building.

(*Agni-Purāṇa*, Chap. XIV, vv. 16–17 ; *see* under PRĀSĀDA.)

SAMA-BHAṄGA (*see* BHAṄGA)—A pose, in this type the right and left of the figure are disposed symmetrically, the figure seated or standing being poised firmly on both legs without inclining to right or left.

SAMITI—Assembly houses ; *see* SABHĀ in which senses it is used in *Atharva-veda* (XV, 9, 2, 3).

SAMUDGA—A type of round buildings.

Cf. Vṛittaḥ Samudga-nāmā ।

(1) *Bṛihat-saṁhitā* (Chap. LVI, 23, *J. R. A. S.*, N. S., Vol. VI, p. 319; *see* under PRĀSĀDA).

(2) *Matsya-Purāṇa* (Chap. CCLXIX, vv. 38, 53 ; *see* under PRĀSĀDA).

(3) *Bhavishya-Purāṇa* (Chap. CXXX, vv. 30, 24 ; *see* under PRĀSĀDA).

SAMUDRA—A type of building.

(1) *Matsya-Purāṇa* (Chap. CCLXIX, vv. 38, 53 ; *see* under PRĀSĀDA).

(2) *Bhavishya-Purāṇa* (Chap. CXXX, v. 24 ; *see* under PRĀSĀDA).

SARORUHA—A type of building, a moulding.

A moulding of the pedestal (*M.*, XXIII, 76, etc.).

See PADMA and compare the lists of mouldings under UPAPĪṬHA and ADHISHṬHĀNA.

A class of six-storeyed buildings (*M.*, XXIV, 47 ; *see* under PRĀSĀDA).

SARVA-KALYĀṆA—A class of buildings.

(*Kāmikāgama*, XLV, 42–49 ; *see* under MĀLIKĀ.)

SARVA-KĀMIKA (*see* UTSEDHA)—Also called ' dhanada', a height which is $1\frac{3}{4}$ of the breadth.

(*See M.*, XXXV, 22–26, and *cf. Kāmikāgama*, L, 24–28, under ADBHUTA.)

SARVATO-BHADRA—A type of building, pavilion, hall, entablature, window, phallus ; a joinery, a four-fold image one on each side of a four-faced column ; a village, a town, having a surrounding road and entrances on four sides ; a house furnished with uninterrupted and surrounding terraces on every side.

(1) Apratishiddhālindaṁ samantato vāstu sarvato-bhadram ।
Nṛipa-vibudha-samūhānāṁ kāryaṁ dvāraiś chaturbhir api ॥

'An edifice with uninterrupted terraces on every side is termed Sarvato-bhadra (i.e., goodly on every side); such a one is fit for kings and gods, and ought to have four entrances.

(*Bṛihat-saṁhitā*, LIII, 31, *J. R. A. S.*, N. S., Vol. VI, p. 285.)

'Sarvato-bhadra is the name of a kind of building which has four entrances, many spires or turrets (śikhara), many beautiful dormer windows and five storeys, and is 26 cubits broad.'

(*Ibid.*, LVI, 27, *J. R. A. S.*, N. S., Vol. VI, p. 320.)

(2) *Matsya-Purāṇa* (Chap. CCLXIX, vv. 29, 34, 35, 48, 53; *see* under PRĀSĀDA).

(3) *Bhavishya-Purāṇa* (Chap. CXXX, v. 34; *see* under PRĀSĀDA).

A type of quadrangular building:

(4) *Agni-Purāṇa* (Chap. CIV, vv. 14–15; *see* under PRĀSĀDA).

(5) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 24–25; *see* under PRĀSĀDA).

(6) Sarvato-bhadram ashṭāsyam—the Sarvato-bhadra house (śālā) has eight faces.—(*Kāmikāgama*, XXXV, 88.)

An entablature (*ibid.*, LIV, 8).

(7) A class of villages (*M.*, IX, 2, 126 f.).
A type of prastara or entablature (*M.*, XVI, 185).
A kind of joinery (*M.*, XVII, 53).
A class of maṇḍapa or pavilions (*M.*, XXXIV, 555).
A type of śālā or mansion (*M.*, XXXV, 4).
A class of windows (*M.*, XXXIII, 583).
A kind of phallus (*M.*, LII, 114).

(8) Sarvato-bhadra-devālaya—'according to Varāhamihira (*Bṛihat-saṁhitā*, LVI, 27) it means a temple with four doors and many spires, i.e., such a one which looks equally pleasing from all sides.'—*Ep. Ind.*, Vol. I, p. 382, note 50.)

(9) Sarvato-bhadra-chatur-mukha ratna-traya-rūpa-tri-bhuvana-tilaka-Jina-chaityālaya vanu ।

'The Tribhuvana Jina chaityālaya temple . . . (which is) auspicious on every side, has four faces (and) is the embodiment of the three jewels (of the Jainas).'—(Karkala inscrip. of Bhairava II, line 17, *Ep. Ind.*, Vol. VIII, pp. 132, 135.)

(10) Nayana-mano-haraḥ Sarvvato-bhadraḥ ।

'Apparently the name of a hall in the first storey of the cave temple. (The Pallava inscrip. of the seven Pagodas, no. 13, *Ep. Ind.*, Vol. X, p. 7.)

(11) Sarvato-bhadra-pratimā—'literally an image lovely on all sides, is apparently a technical term for a "four-fold image," one being carved on each side of a four-faced column.'—(Jaina Inscrip. from Mathura, no. 11, *Ep. Ind.*, Vol. I, p. 382, footnotes 50, 51.)

SAHĀYA-DURGA—A kind of fort.

(*See* details under DURGA.)

SAHASRA-LIṄGA—A thousand-phalli, a group of phalli of Śiva.

'Set up on the colonnade to the west a row of liṅgas forming the thousand liṅgas.'—(*Ep. Carnat.*, Vol. IV, Chamrajnagar Taluq, no. 86 ; Transl., p. 11, line 9 ; Roman Text, p. 18, line 14.)

SAṀKĪRṆA—A type of building, houses built with a certain number of materials, a joinery.

Buildings made of more than two materials (*M.*, XVIII, 139, etc., *see* under VIMĀNA and PRĀSĀDA).

A class of buildings (*Kāmikāgama*, XLV, 62 ; *see* under MĀLIKĀ).

A kind of joinery (*M.*, XVII, 140, 146).

SAṀGAVINĪ—A cattle-shed, an open shed for milking cows.

SAṀGRAHA—A combination of mouldings at the bottom of a column.

Ekāṁśaṁ pādukaṁ kuryāt pañcha-bhāgaṁ tu saṁgraham ।

(*M.*, XV, 179, etc.)

For its synonyms *see M.*, XVI, 51–52.

SAṀGRAHAṆA—A fortress to defend a group of ten villages.

Daśa-grāmī-saṁgraheṇa saṁgrahaṇaṁ sthāpayet ।

(*Kauṭilīya-Artha-śāstra*, Chap. XXII, p. 46.)

SAṀGHĀRĀMA (*see* VIHĀRA)—Originally the assembly place of the Saṅgha or Buddhist monks, later in the time of the Nālandā University, a college comprising lecture halls, students' hostel and chapel, while the *vihāra* or original monastery implied the residential quarters of the monks or professors, residences of monks or hermits, the monastery.

(*Vide* Taxila plate of Patika, line 3, *Ep. Ind.*, Vol. IV, pp. 55, 56.

SAṀCHĀRA—An entrance, a door, a gate, an outlet, a military post, a tower or circuit on the top of the surrounding wall of a village or town.

(*M.*, X, 109, etc.)

SAṀCHITA—A class of buildings in which the breadth is the unit of measurement, the temples in which the idol is in the sitting posture.

(*M.*, XIX, 7–11 ; XXX, 103–174 ; *see* under APASAṀCHITA.)

Pratyekaṁ tri-vidhaṁ proktaṁ saṁchitaṁ chāpy-asaṁchitam ।
Upa-saṁchitam ity-evam . . . . ।

(*Kāmikāgama*, XLV, 6–7.)

SAṀPŪRṆA—A class of buildings.

(*Kāmikāgama*, XLV, 29–30 ; *see* under MĀLIKĀ.)

SAṀVIDDHA—A fortified city.

(*M.*, X, 41 ; *see* under NAGARA.)

Cf. Visiting 'the gramas, nagaras, kheṭas, kharvaṭas, maḍaṁbas, pattanas, droṇamukhas and saṁbāhanas—the cities of the elephants at the cardinal points.'—(*Ep. Carnat.*, Vol. VII, Shikarpur Taluq, no. 118 ; Transl., p. 86, last para., line 14.)

SAṀSAD—An assembly hall (built within a wedding pavilion).

Cf. Ratha-rathi-yutā hy āsan kṛitrimā hy akṛitopamāḥ ।
Sarveshāṁ mohanārthāya tathā cha saṁsadaḥ kṛitāḥ ॥

(*Skanda-Purāṇa*, Māheśvara-khaṇḍa-prathma, Chap. XXIV, v. 13.)

SAṀSTHĀNA—The arrangement, laying-out, plans of buildings and other objects.

(1) Tri-koṇaṁ vṛittam ardhendum ashṭa-koṇaṁ dvir-ashṭakam ।
Chatush-koṇam tu kartavyaṁ saṁsthānaṁ maṇḍapasya tu ॥

The plan of a maṇḍapa should be made triangular, quadrangular, octagonal, sixteen-angular, half moon-shaped, and circular.

(*Matsya-Purāṇa*, Chap. CCLXX, vv. 15–16.)

(2) Tri-koṇaṁ padmam arddhenduṁ chatush-koṇaṁ dvir-ashṭakam।
Yatra tatra vidhātavyaṁ saṁsthānaṁ maṇḍapasya tu ॥

(*Garuḍa-Purāṇa*, Chap. XLVII, vv. 32–33.)

SĀRA—A class of buildings.

(*Kāmikāgama*, XLV, 60 ; *see* under MĀLIKĀ.)

SĀLA(-LĀ)—A wall, a rampart, an apartment, a house.

(1) Udyānāmra-vanopetāṁ mahatīṁ sāla-mekhalām ।
Commentary : sālaḥ prākāraḥ (enclosure wall), sāla-vanaṁ vā ।

(*Rāmāyaṇa*, I, 5–12.)

(2) Antare śesha-bhāgāṁs tu hitvā madhye tu sālakam ॥
Sāla-gopurayos tuṅgastv-adhikaś chāpi mūlataḥ ॥
Agrato'lindakopetam aṭṭālaṁ sālakāntare ॥

(*Kāmikāgama*, XXXV, 112A, 124, 126.,

(3) Sālāntaṁ vedikordhve tu yuddhārthaṁ kalpayet sudhiḥ ।

(*M.*, IX, 364.

See also *M.*, XXXI, 36, 37 (pañcha-sālā), 39 (Jāti-sālā), 40, 41, 44, 48, 52, etc.

Sāla(-ā)-janma-samaṁ chaiva dhāmna-janma-samam tu vā ।
Sālāṅgādhikaṁ hīnaṁ chech chorair arthaṁ vinaśyate ।

(*M.*, LXIX, 42, 45.)

(4) Kanakojvala-sāla-raśmi-jālaiḥ parikhāmbhu . . . prati-bhimbitaiḥ ।

'Through the mass of the rays which issue from its golden walls and which are reflected in the water of its (Vijayanagara's) moat.'—(Vijayanagara inscrip. of Devaraja II, lines 7–8, *H. S. I. I.*, Vol. I, no. 153, pp. 162, 164.)

(5) Antaraṁ sadma-sālam—'the inner wall of the shrine.'—(Ranganatha inscrip. of Sundara-pandya, v. 22, *Ep. Ind.*, Vol. III, pp. 13, 16.)

(6) Sphaṭika-sālā-nibhaṁ babandha—'like a wall of crystal.'—(Two inscrip. of Tammusiddhi, no. A, Tiruvālaṅgāḍu inscrip., v. 16, *Ep. Ind.* Vol. VII, pp. 124, 125.)

(7) Durllaṁgha-dushkara-vibheda-viśāla-sālā-durggādha-dustara-bṛihat-parikhā-paritā ।

'(The city of Kāñchī) whose large rampart was insurmountable and hard to be breached (and) which was surrounded by a great moat, unfathomable and hard to be crossed.'—(Gadval Plates of Vikramāditya I, v. 6, line 21, *Ep. Ind.*, Vol. X, pp. 103, 105.)

(7) Śrīmān esho'rkka-kīrttir nnṛipa iva vilasat sāla-sopānakādyaiḥ ।

'That honourable one like a king of sun-like glory (erected) splendid walls and stairs.'—(*Ep. Carnat.*, Vol. II, no. 105; Roman Text, p. 97, line 14; Transl., p. 164, para. 6.)

SIDDHA—A type of storeyed building, a class of divine beings.

A class of two-storeyed buildings (*M.*, XX, 94, 16–18; *see* under PRĀSĀDA).

Semi-divine beings, their images are described (*M.*, LV, 88 f.).

SIDDHĀRTHA—A type of building furnished with two halls.

Siddhārtham apara-yāmye yama-sūryaṁ paśchimottare śāle ।

'A house with only a western and southern hall is termed Siddhārtha.'

(*Bṛihat-saṁhita*, LIII, 39, *J. R. A. S.*, N. S., Vol. VI, p. 286.'

SINDHUKA—A class of buildings.

(*Kāmikāgama*, XLV, 23–28 ; *see* under MĀLIKĀ.)

SI(ŚI)LĀ-VAṬA—A stone mason.

'Sūdradhāra-Āsalena baṁdhitā tathā silāvaṭa-jāhaḍena ghaṭitā ।

'The step-well was constructed by the architect Āsala and (the stones were) worked and shaped by the mason Jāhaḍa.—(Manglan stone inscrip., lines 13–14, *Ind. Ant.*, Vol. XLI, p. 88.)

SIṀHA—A type of pavilion, a class of oval buildings, a riding animal (lion) of gods.

A maṇḍapa or pavilion with sixteen pillars (*Matsya-Purāṇa*, Chap. CCLXX, v. 13 ; *see* under MAṆḌAPA).

Siṁha is the name of a kind of one-storeyed building which is dudecagonal in plan, covered by lions (? siṁhākrānta) and eight cubits wide :

(1) *Bṛihat-saṁhitā* (Chap. XLV, 28, *J. R. A. S.*, N. S., Vol. VI, p. 329).

(2) *See* quotation of the commentary from Kāśyapa, which is more explicit.

Siṁhaḥ siṁhaiḥ samākrāntaḥ koṇair dvā-daśabhir yutaḥ ।
Vishkambhād ashṭa-hastaḥ syād ekā tasya cha bhūmikā ॥

(3) *Matsya-Purāṇa* (Chap. CCLXIX, vv. 29, 36, 40, 49, 53 ; *see* under PRĀSĀDA).

(4) *Bhavishya-Purāṇa* (Chap. CXXX, v. 35 ; *see* under PRĀSĀDA).

A kind of oval building :

(5) *Garuḍa-Purāṇa* (Chap. XLVII, v. 29–30 ; *see* under PRĀSĀDA).

(6) The lion, a riding animal of gods.

Devānāṁ vāhanaṁ siṁham (*M.*, LXIII, 1), the sculptural description of his image (*ibid.*, 2–46).

SIṀHĀSANA (*cf.* ĀSANA)—A throne or seat, marked with a lion.

(1) Siṁha-mudrita-manoharāsanam ।
Kesari-lāñchhitaṁ tv-atha manoharāsanam ।

(*M.*, XLV, 204, 206.)

Mānasāra (Chap. XLV, 1–112, named Siṁhāsana) :

The lion seat or throne is made for the use of deities and kings (line 1). These thrones are first divided into four classes (lines 4–8)—the Prathama (first) throne is stated to be fit for the first coronation, the Maṅgala throne for the Maṅgala-coronation, the Vīra throne for the Vīra-coronation, and the Vijaya throne for the Vijaya-coronation. It should be noted that these four thrones are used for the four stages of coronation of the same king.—(*M.*, XLIX, 166, etc.)

Concerning deities, the Nityārchana throne is used for daily worship, Viśesha-throne on some special occasions; the Nityotsava-throne, and the Viśeshotsava-throne are used for ordinary and special festivals respectively (lines 9–11).

But the thrones for both deities and kings, for all purposes, are divided into ten kinds (*see* below). An account of the general plan as well as of the measurement of the various parts of them is given in detail (lines 17–213). They are technically called—Padmāsana, Padma-keśara, Padma-bhadra, Śrī-bhadra, Śrī-viśāla, Śrī-mukha, Bhadrāsana, Padma-bandha, and Pāda-bandha (lines 12–16).

Of the ten kinds, the first, Padmāsana, is used as the throne for Śiva or Vishṇu (121); the Padma-bhadra for the king Adhirāja (i.e., Chakravartin or emperor) (line 143); the Śrī-bhadra is fit for the kings Adhirāja and Narendra for all purposes (line 153); the Śri-viśāla is fit for the kings Pārshṇika and Narendra (171); the Śrī-bandha is for the kings Pārshṇika and Paṭṭa-dhara (line 174); the Śrī-mukha for the king Maṇḍaleśa (line 177); the Bhadrāsana for the king Paṭṭa-bhāj (line 179); the Padma-bandha for the king Prāhāraka (line 182); and the Pāda-bandha throne is fit for the king Astra-grāha (line 190).

The lion-legs are, however, not attached to the throne of Astra-grāha (line 191). Thrones of all other petty kings of the Vaiśya and the Śūdra castes are stated to be furnished with pedestals instead, and are made four-cornered square (lines 192–193). But thrones of all other kings are marked with lions and furnished with six legs (line 196). These thrones are stated to be made facing the east (prāṅmukha) (line 197).

Of the thrones of deities, the Nirīkshaṇa (eyes, windows) is made on the four sides (line 198).

Various kinds of thrones are thus described but the most beautiful one according to one's choice should be used:

Evaṁ cha vividhaṁ proktaṁ yan mānoramya(m) mānayet | (200)

(2) 'This is the mighty lion-throne (Siṁhāsana) on which sat the glorious powerful king, in whose arm is strength, the Lord Emperor Kāliṅga Niśśaṅka Kaṅkeśwara.'

'Siṁhāsanāya—on the lion 1, 2, 3, 4, 5, 6, 7, 8 (pillars). Lion throne, royal throne, throne . . . In this case there was actually a large lion, whose fine proportions remind one of the Assyrian bulls and which formed the support, or one of the supports of the royal seat. A freize of lions runs round the building.' Rhys Davids.

(Inscrip. at the Audience Hall of Parākrama Bāhu, Pulastipur, Ceylon, *Ind. Ant.*, Vol. II, p. 247, c. 2, para. 4; p. 249, c. 2.)

(3) 'The other shrine contains a fine large figure of Buddha, seated on a siṁhāsana or throne with recumbent lions at the base, and elephants and other carved accessories at the sides.'—(Monumental Antiquities, N.-W. Provinces and Oudh, *Arch. Surv.*, New Imp. Series, Vol. II, Agra Division, p. 95, no. 23, line 6.)

(4) Seats are referred to under various names in Buddhist literature: Āsandi (large couches, *Chullavagga*, VI, 14, 1; *Mahāvagga*, V. 10, 3); couches covered with canopy (*Chullavagga*, VI, 14–1; *Mahāvagga*, V. 10–3); Āsandaka (rectangular chairs), sattaṅgo (arm-chair, sofa); bhaddapīṭham (state-chair), pīṭhikā (cushioned chair), same on a pedestal (etaka-padaka-pīṭham), same with many legs (Āmalaka-vaṇṭika-pīṭham), cane-bottomed chair (kochhom), leaning board (phalakam).

SUKA(-KHA)-NĀSIKĀ—A small room in front of the idol in a temple.

(1) 'The great minister Kampaṇṇa for the repair of the roof stones in the Sukanāsike (a small room in front of the idol) of the god Chenna-keśava set up four pillars with capitals and repaired them.'—(*Ep. Carnat.*, Vol. V, Part 1, Belur Taluq, no. 52; Transl., p. 55, note 1; Roman Text, p. 126.)

(2) 'It (Malleśvara temple at Hulikal) faces north and consists of a garbha-gṛiha, an open sukhanāsi, a navaraṅga, and a porch. The garbha-gṛiha, sukhanāsi, and porch are all of the same dimensions, being about 4½ feet square, while the navaraṅga measures 16 feet by 14 feet.'

'The Sukhanāsi doorway has on its lintel a figure of . . .

The garbha-gṛiha and sukhanāsi have likewise ceilings of the same kind, but that of the porch is the largest and the best of all.'

(*Mysore Arch. Report*, 1915–16, p. 4, para. 10; *see* also p. 5, para. 12; p. 7, para. 13; p. 15, para. 19.)

(3) 'The outer walls of the garbha-gṛiha and sukhanāsi have besides pilasters and turrets . . .'—(*Ibid.*, p. 21, para. 27).

SUKSHETRA—An edifice, a type of building.

Prāk-śālayā viyuktaṁ Sukshetram vṛiddhidam vāstu।

An edifice 'without an eastern hall is named Sukshetra and brings prosperity.'—(*Bṛihat-saṁhitā*, LIII, 37; *see J. R. A. S.*, N. S., Vol. VI, p. 286.)

SUKHĀṄGA—A type of pavilion, a rest-house.

A kind of pavilion used as a rest-house:

Sukhāṅgākhyam iti proktaṁ satra-yogyaṁ tu maṇḍapam।

(*M.*, XXXIV, 272; *see* under MAṆḌAPA.)

SUKHĀLAYA—A pleasure-house, a type of storeyed buildings.

A class of three-storeyed buildings (*M.*, XXI, 22–30; *see* under PRĀSĀDA).

SUGRĪVA—An object having a beautiful neck, a type of pavilion.

A pavilion with twenty-four pillars—(*Matsya-Purāṇa*, Chap. CCLXX, v. 13; *see* under MAṆḌAPA).

SUCHIYA—Cross-bar in a Buddhist rail.

(*Mahāsudassana-sutta*, 1, 5, 9; compare *Chullavagga*, VI, 3, 3.)

SUDHĀ—Stucco, one of the building materials, also used for plaster, mortar, whitewash.

(1) *See* Ratnapura inscrip., A.D., 1114 of Jajalladeva, v. 16, *Ep. Ind.*, Vol. I, pp. 35-38.

(2) *See* Dewal Praśasti of Lalla the Chhinda, v. 28, *Ep. Ind.*, Vol. I, pp. 80, 84.

(3) *See Mānasāra* under ĀBHĀSA.

SUNDARA—A beautiful object, a type of storeyed buildings.

A class of six-storeyed buildings. (*M.*, XXIV, 15; *see* under PRĀSĀDA.)

SUPRATI(-Ī)KĀNTA—A type of building, a kind of site-plan.

A kind of prākāra or enclosure buildings—(*M.*, XXXI, 24; *see* PARIVĀRA and PRĀKĀRA.)

A class of nine-storeyed buildings—(*M.*, XXVII, 23–36; *see* under PRĀSĀDA).

A site plan in which the whole area is divided into 484 equal squares.—(*M.*, VII, 30–31; *see* under PADA-VINYĀSA.)

SUBHADRA—A type of pavilion, buildings furnished with a beautiful front porch.

A pavilion with twelve pillars—(*Matsya-Purāṇa*, Chap. CCLXX, v. 14; *see* under MAṆḌAPA.)

SUBHŪSHAṆA—A well decorated house for the use of a married couple, a type of pavilion where a ceremony is performed on a wife's perceiving the first signs of conception.

Subhūshaṇākhyaṁ viprāṇāṁ yogyaṁ puṁsavanārthakam।

(*M.*, XXXIV, 354; *see* under MAṆḌAPA.)

SUMAṄGALĪ—A kind of ornament.

An ornament for the images of female deities.—(*M.*, LIV, 49, 95 ; *see* under BHŪSHAṆA.)

SURATA—A type of pavilion.

A pavilion with sixty-pillars.—(*Matsya-Purāṇa*, Chap. CCLXX, v. 7 ; *see* under MAṆḌAPA.)

SUŚLISHṬA—A type of pavilion.

A pavilion with thirty-six pillars.—(*Matsya-Purāṇa*, Chap. CCLXX, v. 11 ; *see* under MAṆḌAPA.)

SUSHIRA—A hole, a hollow, an aperture, a cavity.

(1) Prāg-grivaḥ-pañcha-bhāgena nishkāsa(śa)s tasya chochyate ।
Kārayet sushiraṁ tad-vat prākārasya tri-bhāgataḥ ॥
(*Matsya-Purāṇa*, Chap. CCLXIX, v. 24.)

(2) Sushiraṁ bhāga-vistīrṇaṁ bhittayed bhāg-vistarāt ।
(*Agni-Purāṇa*, Chap. CIV, v. 3.)

(3) Dvāra-vat pīṭha-madhye tu śeshaṁ sushirakaṁ bhavet ।
(*Garuḍa-Purāṇa*, Chap. XLVII, v. 16.)

(4) *See M.*, LVX, 83, LXVII, 15, etc.

SUSAṀHITA—A site plan in which the whole area is divided into 400 equal squares.

(*M.*, VII, 28–29, also XXXI, 18, etc.; *see* under PADA-VINYĀSA.)

SŪ(-SU)-(T)ĀLAYA—An enclosure, a cloister, a covered arcade forming part of a monastic or collegiate establishment, an enclosed place of religious retirement, a Jain monastery.

Cf. Ep. Carnat., Vol. II, nos. 59, 75, 76, 78, 85 ; Introduction, p. 37, last para., line 3 ; Roman text, p. 57, line 27, pp. 62, 70 ; Transl., pp. 147, 151, 156 :

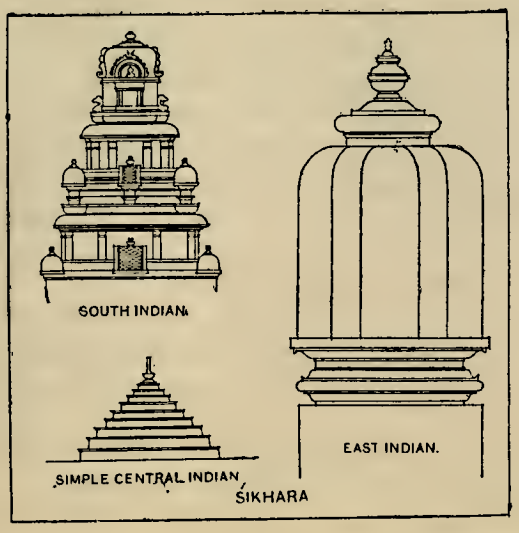
(1) Śrī-Gaṅga-Rajeṁ Suttāle karaviyale (no. 75, Roman text, p. 62).

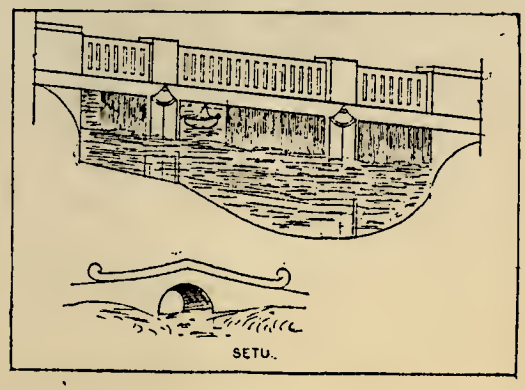
(2) Śrī-Gaṅga-Rāja Suttālayavaṁ māḍisidam (no. 76, Roman text, p. 62).

(3) Suttālayada bhittiya mādisi—'had the wall round the cloisters and the twenty-four Tīrthaṅkaras made' (no. 78, line 1).

(4) Gommaṭa devara Suttālayadolu (no. 86, line 1).

(5) Gaṅgavāḍiya gommaṭa-devargge suttālayamam eyde māḍisidam—'for Gommaṭadeva of Gaṅgavāḍi he had the cloisters around made.'—(No. 90 ; Roman text, p. 72, line 9 from bottom upwards ; Transl, p. 158, para. 5 ; *see* also no. 59 ; Roman text, p. 57, line 27.)


SOUTH INDIAN.
EAST INDIAN.
SIMPLE CENTRAL INDIAN
ŚIKHARA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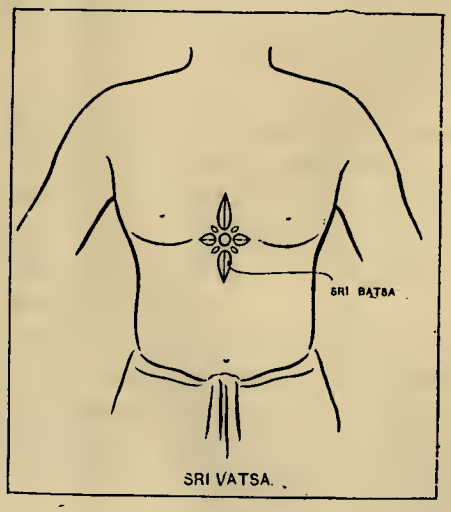
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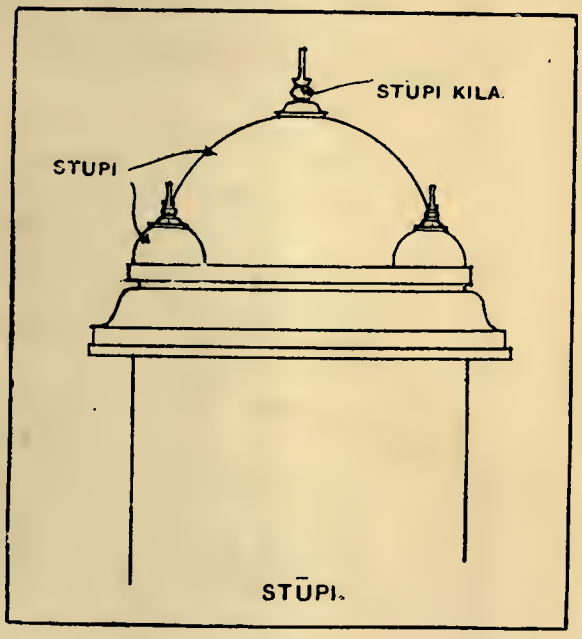
STUPI KILA.
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(6) ' Inside (the bastis or Jaina temples) is a court probably square and surrounded by cloisters (*see* photo no. 149 of Jaina basti at Śrāvana Belgola, Fergusson p. 270), at the back of which rises the vimāna over the cell, which contains the principal image of the Tīrthaṅkara.'—(Fergusson, *Ind. and East. Arch.*, p. 269, last para., photo no. 149, p. 270.)

SŪTRA-GRĀHIN (*see* under STHAPATI)—The draftsman, an architect.

SŪTRA-DHĀRA (*see* under STHAPATI)—A carpenter, an architect.

SŪTRA-DHĀRIN (*see* under STHAPATI)—The thread-holder, the manager, an architect.

SŪTRA-PAṬṬI (*see* PAṬṬA and PAṬṬIKĀ)—A part of a door.

Dvāra-tāre chatush-pañcha-shaṭ-saptāshṭa vibhājite ||
Ekāṁśaṁ sūtra-paṭṭiḥ syāt samaṁ vā bahalaṁ bhavet ||

(*Vāstu-vidyā*, ed. Gaṇapati Śāstri, XIV, 1, 2.)

SŪRYA-VIŚĀLAKA—A site plan of 400 square plots.

(*M.*, VII, 26-27, *see* PADA-VINYĀSA.)

SETU—A bridge in general, a barrier, a boundary, a limit, a landmark, a bridge of earth, a cause-way, narrow pass or mountain-road, a mound, a bank, a dam.

(1) Karṇa-kīlāya-sambandho'nugṛihaṁ setuḥ—' the fastening of the roof of a house to the transverse beam by means of iron bolts is called setu.'—(*Kauṭilīya-Artha-śāstra*, Chap. LXV, p. 166, para. 1.)

(2) Maṭhā vedādīnāṁ dvija-pura-vihārāḥ prati-diśaṁ virājante satryāṇy api cha paritas setu-nivabḥāh ||

(Two Bhuvaneśvara inscrip. no. A, of Svapneśvara, v. 30, *Ep. Ind.*, Vol. VI, p. 202.)

(3) Sa khalu Bhāgīrathī-patha-pravarttamāna-nānā-vidha-nauvāṭa-sampādita-setu-vandha-nihita-śaila-śikhara-śreṇī-vibhramāt |

' From the illustrious camp of victory at Śrī-Mudgagiri, where the bridge, which is produced by the wall of boats of various kinds proceeding on the path of the Bhāgirathī, surpasses the beauty of a chain of mountain tops.'

Dr. Hultzsch seems to think that ' the broad line of boats floating on the river resembled the famous bridge of Rāma.'

Dr. Rājendralāl Mitra, however, concludes from this passage, that ' Nārāyaṇapāla had made a bridge of boats across the Ganges.'

(Bhagalpur Plates of Nārāyaṇapāla, lines 24–25, *Ind. Ant.*, Vol. XV, pp. 306, 308–9, and note 29.)

SENĀ-MUKHA—A division of an army, a mound in front of the gate of a city, a prosperous royal city (*see* under NAGARA).

(1) Nānā-janaiś cha saṁpūrṇaṁ bhūpa-harmyeṇa saṁyutam ।
Bahu-raksha-samopetam etat senā-mukhaṁ bhavet ।
(*M.*, x, 70–71.)

(2) Rāja-veśmā-samāyuktaṁ sarva-jāti-samanvitam ।
Guhya-pradeśa-saṁyuktaṁ senā-mukham ihochyate ॥
(*Kāmikāgama*, xx, 12.)

SE(-ŚI)LĀ-RŪPAKA—A statue, a rock-sculpture.

Cf. ' The rock sculpture or statues, gift of his (Sivama's) wife Vijaya.' (Kuda Inscrip. no. 6, line 7, *Arch. Surv.*, new Imp. Series, Vol. IV, p. 85.)

SAINYA-DURGA—A fort (*see* details under DURGA).

SOPĀNA—Stairs, steps, a stair-case, a ladder.

(1) *Mānasāra*, Chap. xxx :

Flights of steps are constructed for ascending up and descending from temples, residential buildings, pavilions, enclosure (prākāra), gate-houses, hilly tracts (parvata-deśa), step-wells, wells, ponds, villages, and towns (lines 85-89).

Their situation :

They are stated to be constructed on the front, back and sides of a residential building or temple :

Sarveshāṁ mukha-bhadrāṇāṁ pārśve sopāna-saṁyutam । (93)
Pārśvayor dvāra-deśe tu mukha-sopānam eva vā । (94)
Guhyānta-dvāra-deśe tu vāme sopāna-saṁyutam । (97)
Pramukhe mukha-sopānaṁ kuryāch chhilpa-vit-tamaḥ । (102)
Prapāṅge pramukhe bhadre sopānaṁ pūrva-pārśvayoḥ । (105)
Pārśvayoḥ pṛishṭha-deśe tu tat-pūrve paksha-pārśvayoḥ । (100)
Yatra deśe tu sopānaṁ tatra dosho na vidyate । (101)
Alinda-yuktaṁ tad-dvāre vāme sopāna-saṁyutam । (113)
Vinālinda-pradeśe tu pramukhe sopānam eva cha । (114)

Their situation in other places :

Gopurāṇāṁ tu tat-pārśve sopānaṁ lakshaṇānvitam । (117)
Adri-deśe samārohya yatra tatraiva kārayet । (118)
Vāpī-kūpa-taṭāke vā paritaḥ sopāna-saṁyutam । (119)
Chatur-dikshu chatush-koṇe chāntarāle'thavā punaḥ । (120)
Evam eva yathā-deśe bhadra-sopānaṁ eva vā । (121)

Their plan :

Trayo-viṁśach chhatāntaṁ syād devānām iti kathyate । (141)
Paṭṭādri-mārga-paryantaṁ tiryak chordhvordhva-choktavat । (142)

Mānushāṇāṁ tu sopānaṁ paṭṭikā-yugma-saṁyutam । (143)
Sopāna-pārśvayor deśe hasti-hasta-vibhūshitam । (155)
Hasta-mūla-viśāle tu choktāṅguliṁ na mānayet । (156)
Mūlena tat (mūle chāgra)-tri-bhāgaikāṁ hastāgrāntaṁ kshayaṁ kramāt । (157)
Hasti-hasta-vad ākāraṁ rāga-yuktaṁ manoharam । (150)
Tri-chatush-pañcha-vaktraṁ vā mūlena siṁhānanair yutam । (159)
Agrādho-dhārapaṭṭaṁ syāt paṭṭikā chokta-mānakam । (160)
Ādhāra(agradhāra)ṁ pālikākāraṁ paṭṭikā vedikākṛitiḥ । (161)
Adri-sopāna-pārśve tu na kuryāt pārśvayo'ṅghrikam । (163)
Adri-Sopāna-deśe tu dīrgha-mānaṁ yatheshṭakam । (136)
Sarvālaṅkāra-saṁyuktaṁ sopānaṁ lakshaṇānvitam । (162)

Measures of the other flights of steps are given in detail (lines 125–132, 134–136).

The two kinds of steps (and the materials of which they are constructed) :

Achalaṁ cha chalaṁ chaiva dvidhā sopānam īritam । (90)
Śilābhiś cheshṭakair vāpi dārubhiḥ sachalaṁ matam । (91)
Sarvaiś chaivāchalaṁ proktaṁ kshudra-sopāna-saṁyutam । (92)

The account given above is that of the stationary steps, that of the movable (? moving) steps is also given :

Achalaṁ cheti proktaṁ chalaṁ sthāpyaṁ yatheshṭakam । (124)
Tri-chatush-pañcha-shaṇ-mātraṁ chalaṁ sopāna-pādake । (144)
Tad-ghanaṁ cha viśāle tu samaṁ vā pādam ādhikam । (145)
Ardhādhikaṁ tu pādona-dvi-guṇaṁ tri-guṇaṁ tataḥ । (146)
Daṇḍa-dvaya-samāyuktaṁ chitra (? chhidra)-yuktaṁ tu paṭṭikā । (147)
Eka-dvi-try-aṅgulaṁ vāpi paṭṭikā-ghanam eva cha । (148)
Dvi-tri-veda-śarāṅgulyaṁ shaṭ-saptāṅgulam eva vā । (149)
Ashṭa-nanda-daśāṅgulyaṁ paṭṭikā-vistṛitaṁ bhavet । (150)
Evaṁ tu chala-sopānaṁ achalaṁ tat pravakshyate । (151)

(2) Vishkambha-chatur-aśram aṭṭālakam utsedha-samāvakshepa-sopānaṁ kārayet ।
Ishṭakāvabandha-pārśvaṁ vāmataḥ pradakshiṇa-sopānaṁ gūḍha-bhitti-sopānaṁ itarataḥ ।
(*Kauṭilīya-Artha-śastra*, Chap. XXIV, pp. 52, 53.)

(3) Sopānaṁ cha yathā-yuktyā hasti-hastaṁ tathaiva cha ॥
(*Suprabhedāgama*, XXXI, 114.)

Ibid, LV :

Tale tale tu sopānam ārohārthaṁ prakalpayet ॥ (167)

Compare Śaṅkha-sopāna (v. 170), hasti-sopāna and lāja-sopāna (v. 174), pradakshiṇa-sopāna (v. 176).

The general plan :

Sopānaṁ pārśvāyor agre tan-mūlasya prayojayet ।
Tan-mūlaṁ syād adhishṭhānaṁ pāda-prastāra-varga-yuk ॥ (177)
Aśva-pādopari sthitvārohaṇaṁ dakshiṇāṅghriṇā ।
Idrig-lakshaṇa-saṁyuktaṁ sopānaṁ saṁpadāspadam ॥ (178)

(4) *Mahābhārata*, I, 185, 20 :

Prāsādaiḥ sukṛitochchhrāyaiḥ . . . ।
Sukhārohaṇa-sopānaiḥ mahāsana-parichchhadaiḥ ॥

(5) Flights of steps (Vanapalli Plates of Anna-vema, v. 10, *Ep. Ind.*, Vol. III, pp. 61, 59.)

(6) Meru-maṁdara-kailāśān ārurukshur mahāmatiḥ ।
Sopāna-paṅktiṁ śrī-śaile vyatanod vema-bhū-patiḥ ॥

' Desirous of ascending Meru, Mandara and Kailāśa, i.e. to gain heaven through charity) the high-minded king Vema constructed a flight of steps at Śrī-śaila.'—(Nadupuru Grant of Anna-vema, v. 6, *Ep. Ind.*, Vol. III, pp. 288, 291.)

The sopāna is a kind of religious architecture peculiar to India, *cf.* eg., the flight of steps in Chandra-śekhara peak, Sītā-kuṇḍa, Chittagong, Bengal.

(7) Pātāla-gaṅgā-taṭe śrī-śaile . . . sopāna vīthim śubhām—' a beautiful flight of steps in the bank of the Pātāla-gaṅgā at the fort of the Śrī-śaila hill.'—(Tottaramudi Plates of Kataya-vema, v. 8, *Ep. Ind.*, Vol. IV, p. 322.)

(8) Śrī-śailāgrāt prabhavati pathi prāpta-pātāla-gaṅge ।
Sopānāni pramatha-padavīm ārurukshuś chakāra ॥

' Constructed the flight of steps from Pātālagaṅgā to the summit of the Śrī-śāila as if to climb up to the abode of Śiva.'—(Inscrip. of the Reddis of Kondavidu, no. A, v. 6, *Ep. Ind.*, Vol. XI, pp. 320, 314.)

(9) ' Brahmapryan . . . caused to be made the stone work of a flight of steps, with tiger's head at the bottom for the abhisheka-maṇḍapa in the temple of Vaṇḍuvarāpati-Emberuman at Manimaṅgalam . . .'

(Inscrip. of Rajaraja III, no. 39, *H. S. I. I.*, Vol. III, p. 86.)

(10) Śrī-Vāgmatī-jalāvatāra-sopānārama-ghaṇṭa-dharmma-śālā-pratishṭhā-karmma samāpayan ।
Sopānālir iyaṁ vidagdha-rachanā-suślishṭa-chitropalā ramyā vāyu-sutādhivāsa-vihita-proddāma-vighnāvaliḥ ।
Sampādyānhika-sakta-loka-vihita-svechchhāvakāśa-sthalā snāna-dhyāna-hitā sudhā-dhavalita-prāntā chiraṁ rājataṁ ॥

(Inscrip. from Nepal, no. 23, Inscrip. of Queen Lalita-tri-pura-sundari, v. 1, Second Series, *Ind. Ant.*, Vol, IX. p. 194.)

(11) Śrīmān esho'rkka-kīrttir nnṛipa iva vilasat sāla-sopānakādyaiḥ ।

' That honourable one, like a king of sun-like glory (erected) splendid walls and stairs.'—(*Ep. Carnat.*, Vol. II, no. 105 ; Roman text, p. 79, line 14; Transl., p. 164, para. 6.)

(12) Mahā-sopāna-paṅktiyumam rachisidam—' had the flight of grand stairs laid out.'—(*Ep. Carnat.*, Vol. II, no. 115 ; Roman text, p. 87 ; Transl., p. 171.)

(13) ' For the new Jina temple in the place of his government, in order that long life might be to Permmanaḍi, caused steps to be cut to the deep tank of Baḷora-kaṭṭa, had the embankment built, provided a sluice, and . . .' —(*Ep. Carnat.*, Vol. III, Maṇḍya Taluq, no. 78 ; Transl., p. 47 ; Roman text, pp. 101–102.)

(14) The *Chullavagga* (vv. 11, 6 ; VI, 3, 3) and the *Mahāsudassana-sutta* (I, 59) have referred to stairs of three kinds, namely, brick stairs, stone stairs, and wooden stairs. All these are furnished with balustrades (ālaṁbana-bāhu). Each of these had posts or banisters (thambā), cross-bars (sūchiyo) let into these banisters, and a head-line (uṇhisam) running along the top of the banisters.—(Compare Rhys Davids' *Buddhist Suttas*, p. 262, and the writer's *Indian Architecture*, p. 13.)

SOMA-SŪTRA—A drain, a channel for conveying holy water from a Phallus of Śiva or any other deity of a shrine.

' The drainage channel from the shrine, an ornamental feature of these temples.'—(Chalukyan Architecture, *Arch. Surv.*, New Imp. Series, Vol. XXI, p. 39.)

See also *Champa* by Mazumdar, p. 237.

SETU—A bridge, a dam, a causeway (*R.-V.* IX, 41, 2 ; *Taitt. Sam.*, III, 2, 2, 1 ; VI, 1, 4, 9, 5, 3, 3 ; VII, 5, 8, 5 ; *Kath. Sam.*, XXVII, 4 ; *Ait. Brā.*, III, 35 ; *Taitt. Brā.*, II, 4, 2, 6 ; *Śāt. Brā.*, XIII, 2, 10, 1 ; *Bṛihad-Upanished*, IV, 4, 4 ; *Chhand-Upa.*, VIII, 4, 1, 2).

SAUKHYAKA—A pleasure-house, a type of pavilion.

(*M.*, XXXIV, 279 ; *see* under MAṆḌAPA.)

SAUDHA—A plastered, stuccoed or whitewashed house, a large house, a great mansion, a palatial building, a palace.

(1) Kailāśa-śaila-vilāsinas samutturṅgga-śikharasya saudhasyāsthāna-bhūmau ।

(Teki Plates of Rajaraja-chodaganga, line 82, *Ep. Ind.*, Vol. VI, p. 342.)

(2) Kshetre prabhāse sukṛitādhivāse svakārita-brahma-purī-gṛiheshu ।
Prakshālya pādau pradadau sa saudhaṁ Nānāka-nāmne kavi-paṇḍitāya ॥

' (He) in the sacred Prabhāsa, the habitation of good actions, gave to Nānāka, the Poet and Paṇḍit, having washed his feet, a palace among the mansions of the Brahma-purī founded by himself.'—(Sanskrit Grants and Inscrip., no. 11, v. 8, *Ind. Ant.*, Vol. xi, pp. 106, 107.)

SAUDHA-MĀLIKĀ (*see* PRĀSĀDA-MĀLIKĀ)—A class of buildings, an edifice of the Mālikā class.

SAUMUKHYA—An object having a beautiful face, a type of column, one of the five Indian orders.

(*Suprabhedāgama*, xxxi, 65, 67; *see* under STAMBHA.)

SAUMYA—A class of buildings.

(*Kāmikāgama*, xlv, 40 ; *see* under MĀLIKĀ.)

SAUMYA-KĀNTA—A tpyc of gate-house.

(*M.*, xxxiii, 563 ; *see* under GOPURA.)

SAURA-KĀNTA —A type of storeyed buildings.

A class of nine-storeyed buildings.

(*M.*, xxvii, 5–9 ; *see* under PRĀSĀDA.)

SAUSHṬHIKA—An architectural object or moulding added for the sake of elegance or beauty.

Tad-eva śālā-pārśve chaikaṁ dvyaikena shausṭhika-hārāḥ ।

(*M.*, xxviii, 16.)

Tad-eva-śālā-prānte tu pārśve chaikena saushṭhikam ।

(*M.*, xxix, 26 ; *see* for context, 24–33 ; *see* under AKRA-KĀNTA.)

SKAND-(H)A-KĀNTA—A type of column, a type of gate-house.

The hexagonal or six-sided pillars with six upa-pādas or minor pillars—(*M.*, xv, 246, 23–245).

A type of gate-house—(*M.*, xxxiii ; *see* under GOPURA).

SKANDHA-TĀRA—A type of building extending like the shoulders.

A class of single-storeyed buildings—(*M.*, xix, 172 ; *see* under PRĀSĀDA).

SKANDHĀVĀRA—A division of an army, a camp, a royal residence, a capital city, a fortified town.

(*M.*, x, 42, f. ; *see* under NAGARA.)

Cf. Śrī-Venu-grāma-skaṁdhāvāre sukhena saṁrājya-lakshmīm anubhavan ।

' While he is enjoying the good fortune of universal sovereignty at the famous camp of Venu-grāma.'—(Bhoj Grant of Kārtavīrya, iv, lines 96–97, *Ind. Ant.*, Vol. xix, pp. 247, 248.)

STAMBHA—Fixedness, a support, a stem, a trunk, a post, a pillar, a column, banisters (*Mahāsuddassana-sutta*, I, 59, *see Buddhist-suttas* by Rhys Davids, p. 262, compare *Chullavagga*, VI, 3, 3.)

For references to Vedic pillars, *vide* 107 below.

The column is generally four times the base (*M.*, XIII, 2–3, *see* under ADHIṢṬHĀNA), and the pedestal is stated to be twice or three times the base (*see Mayamata*, under ADHISHṬHĀNA) and the entablature is directed to be $\frac{3}{4}$ of, equal to, or greater by $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, or twice of, the base (*M.*, XVI, 2–4, *see* under PRASTARA).

(1) *Mānasāra* (Chap. XV, 1–448), named Stambha :

Columns are called jaṅghā, charaṇa, (s)talī, stambha, aṅgrika, sthāṇu, thūṇa, pāda, skambha, araṇi, bhāraka, and dhāraṇa (lines 4–6). The height or length of a column is measured from above the base to below the Uttara, or above the pedestal from Janman to the Uttara (lines 7-9). The height of a column is, in other words, ' measured from the plinth (of the former) up to the lowest part of the entablature, that is, from the base to the capital inclusive.' The length of a column is twice, $1\frac{1}{2}$ or $1\frac{1}{4}$ times of its base (lines 8–10) ; or the heights of the column begin with $2\frac{1}{2}$ cubits and end at 8 cubits, the increment being by 6 aṅgulas or $\frac{1}{4}$ cubit (lines 11–12). But according to Kāśyapa (*see* Rām Rāz, *Ess. Arch. of Hind.*, p. 29), the height of the pillar may be 3 times that of the base ; or 6 or 8 times that of the pedestal. The diameter of a pillar may be $\frac{1}{6}$th, $\frac{1}{8}$th, $\frac{1}{9}$th, or $\frac{1}{10}$th of its height, if it be made of wood or stone, $\frac{1}{3}$rd, $\frac{1}{4}$th, or $\frac{1}{8}$th, of the height, if it be a pilaster joined to a wall (kuḍya-stambha). In other words, the column is from three to ten times the diameter. The width of the pilaster, according to the *Mānasāra*, is 3, 4, 5, or 6 mātras (parts), and twice, thrice, or four times of these should be the diameter of the pillar (*M.*, XV, 14-15). The height of a pillar being divided into 12, 11, 10, 9, or 8 parts, one of these parts is the diameter of the pillar, and at the top it is diminished by one-fourth (lines 16–18).

Columns admit almost of all shapes (lines 20-23). A quadrangular (four-sided) pillar is called Brahma-kānta ; an octangular one is called Vishṇu-kānta ; a sixteen-sided or circular one is known as Rudra-kānta ; a pentagonal one is called Śiva-kānta ; and a hexagonal column is called Skanda-kānta. These columns are stated to be uniform from bottom to top ; but the bases of these may be quadrangular (lines 24-25).

With reference to dimensions and ornaments the five kinds of columns—Brahma-kānta, Vishṇu-kānta, Rudra-kānta, Śiva-kānta, and Skanda-kānta—are called Chitra-karṇa (line 31), Padma-kānta (line 39), Chitra-skambha (line 40), Pālikā-stambha (line 73), and Kumbha-stambha (lines 73, 204). The sixth one, Koshṭha-stambha (line 84) in the latter division, is stated to be two-sided, and hence it is same as Kuḍya-stambha or pilaster. It should be noticed that the former set of five names refer to the shapes of columns, i.e. shafts, while the latter set of five names is based on the shapes of the capitals. But in the detailed account both the capital and shaft are included.

Columns when in rows, must be in a straight line.

'The inter-columniation may be two, three, four, or five diameters; it is measured in three ways, first from the inner extremity of the base of one pillar to that of another, secondly from the centre of two pillars, and thirdly from the outer extremities of the pillars including the two bases.' 'There are no fixed inter-columniations in *Indian Architecture*.'—(Rām Rāz, *Ess. Hind. Arch.*, pp. 32, 39.)

Cf. Dhvaja-stambha (*M.*, LXIX, 24, Dhānya-stambha and Śilā-stambha (*M.*, XLVII, 1). The shapes and mouldings of the last one (*ibid.*, 16–18):

Vṛttaṁ vā chatur-aśraṁ vā ashṭāśra-shoḍaśātrakam ।
Pāda-tuṅge'shṭa-bhāge tu triṁśenordhvam alaṅkṛitam ।
Bodhikaṁ mushṭi-bandhaṁ cha phalakā tāṭikā ghaṭam ।

These are apparently the five component parts of the shaft.

The entablature, base, and pedestal are separately described:

Kuṭṭimaṁ chopapīṭham vā sopapīṭha-masūrakam (*ibid.*, 21).

See further details under UPAPĪṬHA, ADHISHṬHĀNA and PRASTARA.

For the component parts of a column, *see* further details below.

(2) *Kāmikāgama*, XXXV:

Nava-hasta-pramāṇāntaḥ stambhotsedhaḥ-prakīrtitaḥ ॥ (24)
Chatur-aṁśaṁ samārabhya shaḍ-daśāṁśaṁ yathā-vidhi ।
Bhāgāt kṛitvaika-bhāgena nyūnaṁ syād agra-vistāraḥ ॥ (26)
Śilā-stambhaṁ śilā-kuḍyaṁ narāvāse na kārayet ॥ (161)

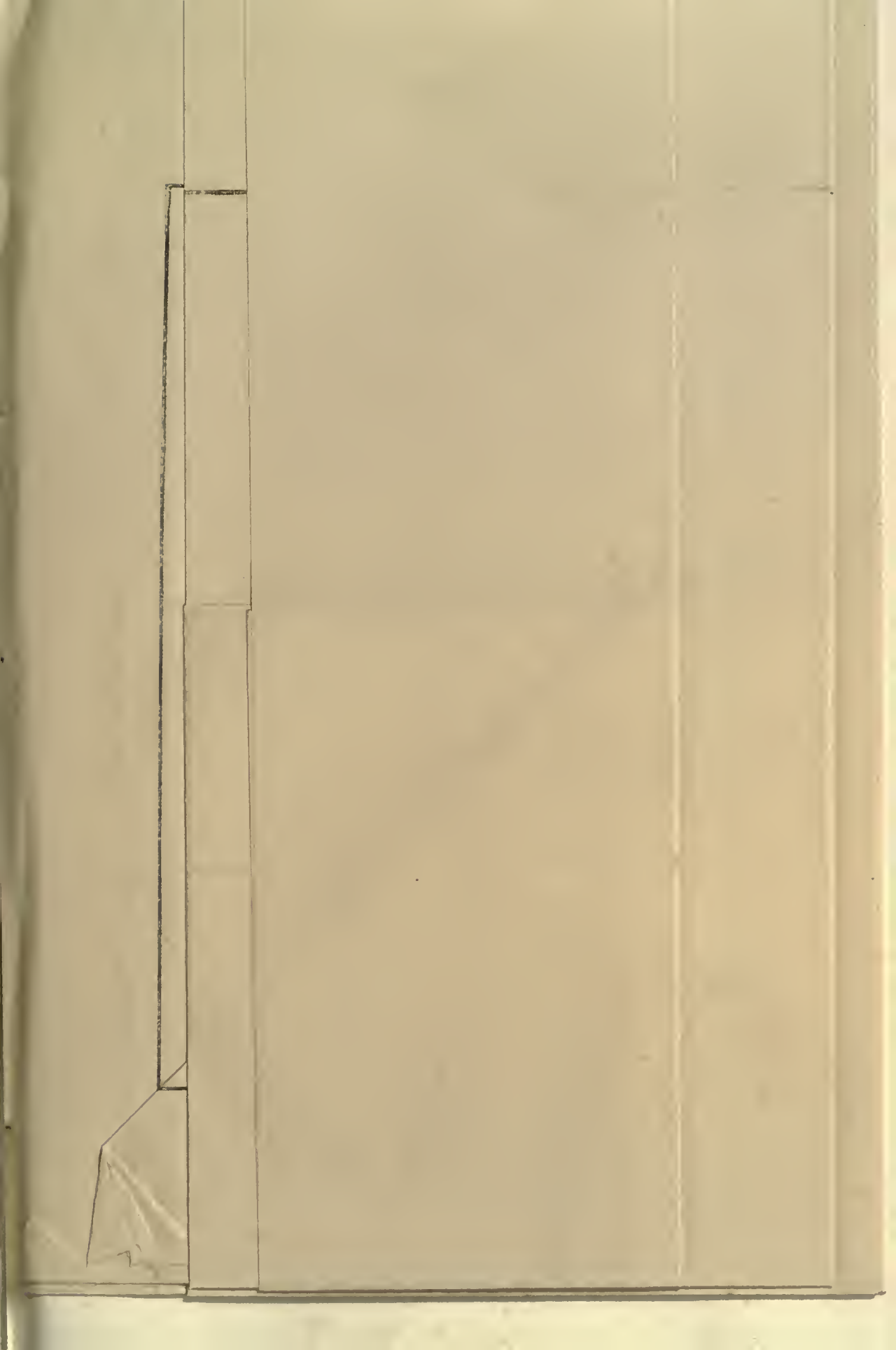
Ibid., LV, 203 (the synonyms):

Sthāṇu(ḥ) sthūṇaś cha pādaś cha jaṅghā cha charaṇāṅghrikam ।
Sthambho hasto lipyaṁ kaṁpaṁ (skambhaṁ) pādānām abhidhānakam ॥

(3) *Suprabhedāgama*, XXXI:

The coloumn compared with its base and entablature:

Pādāyāmam adhishṭhānaṁ dvi-guṇaṁ sarva-sammatam ।
Pādārdhaṁ prastaraṁ proktaṁ karṇaṁ prastaravat samam ॥ (28)



The shapes of the five orders, the fifth being composite of two :

Jāti-bhedaṁ samākhyātaṁ pādānām adhunochyate ॥ (53)
Chatur-aśram athāshṭāśraṁ shoḍaśāśraṁ tu vṛittakam ।
Kumbha-yuktās tathā kechit kechit kumbha-vihīnakāḥ ॥ (54)

The five names and characteristic features of the five orders :

Śrī-karaṁ chandra-kāntaṁ cha saumukhyaṁ priya-darśanam ॥ (65)
Śubhaṁkarī cha nāmāni kartavyāni viśeshataḥ ।
Śri-karaṁ vṛitta-pādānāṁ shoḍaśāśre tu kāntakam ॥ (66)
Saumukhyaṁ hi tathāshṭāśre turyāgre priya-darśanam ।
Chatur-aśrāshṭa-miśre cha pādā kāryā śubhaṁkarī ॥ (67)

This last one is the Indian Composite order.

The common features and mouldings of the five orders :

Pādā nāmā iti prokto teshāṁ lakshaṇam uchyate ॥ (55)
Vistārasya chatur-viṁśat(d)-bhāgaikaṁ pāda-vistaram ।
Tad-eva daṇḍam ākhyātaṁ pādālaṁkāra-karmaṇi ॥ (56)
Mūla-pādasya vistārāt saptaikāṁśena mārgataḥ ।
Dvi-daṇḍaṁ maṇḍir utsedhaṁ daṇḍa-pādaṁ tu vistaram ॥ (57)
Ashṭāṁśaṁ kaṇṭham utsedhaṁ dvi-daṇḍaṁ kumbha-vistaram ।
Utsedhaṁ tu tri-pādaṁ hi pādonā phalakā bhavet ॥ (58)
Tri-daṇḍaṁ vistaraṁ proktaṁ tad-ardhaṁ nirgataṁ smṛitam ।
Vīra-kaṇṭhaṁ tu daṇḍena vistāraṁ tat-samaṁ bhavet ॥ (59)
Tad-ūrdhve potikāyāmaṁ tat-tri-pādaṁ tad-uchchhritam ।
Tri-daṇḍam adhamāyāmaṁ chatur-daṇḍaṁ tu madhyamam ॥ (60)
Uttamaṁ pañcha-daṇḍaṁ tu potikāyāmam uchyate ।
Chitra-patra-taraṁgaiś cha bhūshayitvā tu potikām । (61)
Kumbha-pādam idaṁ proktaṁ kumbha-nimnaṁ prachakshmahe ।
Pādaṁ potikayā yuktaṁ śeshaṁ karma na kārayet ॥ (62)
Kumbha-hīnās tv-ime proktā latā-kumbhaṁ tad uchchyate ।
Kumbhākāraṁ tu tan-mūle tad-ūrdhvaṁ padmam eva tu ॥ (63)
Phalakordhve latāṁ kuryāt tach-chheshaṁ kumbha-pāda-vat ।
Pādāntare tu kartavyam aśaktaś chet tu varjayet ॥ (64)
Sarveshām eva pādānāṁ tat-pādaṁ nirgamaṁ bhavet ॥ (65)
(Of all orders, the projection is $\frac{1}{4}$).

The columns of the main prāsāda (edifice) and of the subordinate maṇḍapas (pavilions) are distinguished :

Prāsāda-stambha-mānasya etat stambhaṁ viśishyate ।
Pādādhikam athādhyardhaṁ pādona-dvi-guṇaṁ bhavet ॥ (105)
Stambhāyāmāshṭa-bhāgaikaṁ stambhasyaiva tu vistaram ।
Vṛittaṁ vā chatur-aśraṁ vā chatur-ashṭāśra-miśrakam ॥ (106)
Shoḍaśāśra-yutaṁ vāpi śilpaiḥ sarvaiḥ suśobhitam ।

Stambhāch cha bodhikādhikyā bodher apy uttarādhikā ॥ (107)
Uttarād vājanādhikyā tasyordhve mudrikāṁ nyaset ।
Mudrikāch cha tulādhikyā jayantī tu talopari ॥ (108)
Chhādayed ishṭakābhis tu tasyordhve kalakān kshipet ॥ (109)

The above passage refers to only a part of the order. The pedestal, base, and entablature are described elsewhere. (*See Suprabhedāgama*, under PĪṬHA and UPAPĪṬHA, ADHIṢṬHĀNA and PRASTARA.)

The mouldings of the part between the entablature and base, that is, the capital and the shafts, are, as described above, called Daṇḍa (v. 56), Maṇḍi (v. 57), Kaṇṭha, (v. 58), Kumbha (v. 58), Phalakā (v. 58), Vīra-kaṇṭha (v. 59), and Potikā (v. 60).

The same are otherwise called Bodhikā, Uttara (v. 107), Vājana, Mudrikā, Tulā, Jayantī, and Tala (v. 108).

(4) *Kauṭilīya-Artha-śāstra* (chap. XXIV, p. 53) :

Stambhasya parikshepāsh shaḍ-āyāmā dvi-guṇo nikhātaḥ chūlikāyāś chatur-bhāgaḥ—' in fixing a pillar, 6 parts are to form its height on the floor, twice as much (12 parts) to be entered into the ground, and one-fourth for its capital.'

(5) *Rāmāyaṇa* (18, VI, 3, etc.) :

Kāñchanair bahubhiḥ stambhair vedikābhiś cha śobhitaḥ ।

(6) *Mahābhārata* (XIV, 2523, etc.) :

Stambhān kanaka-chitrāṁś cha toraṇāni vṛihanti cha ।

(7) *Matsya-Purāṇa* (Chap. CCLV, v. 1-6) :

Athātaḥ saṁpravakshāmi stambha-māna-vinirṇayam ।
Kṛitvā sva-bhavanochchhrāyaṁ sadā sapta-guṇaṁ budhaiḥ ॥
Aśity-aṁśaḥ pṛithutve syād agre nava-guṇe sati ।
Ruchakaś chatur-aśraḥ syāt tu ashṭāśro vajra uchyate ॥ (2)
Dvi-vajraḥ shoḍaśāśtras tu dvā-triṁśāśraḥ pralīnakaḥ ।
Madhya-pradeśe yaḥ stambho vṛitto vṛitta iti smṛitaḥ ॥ (3)
Ete pañcha-mahā-stambhāḥ praśastāḥ sarva-vāstushu ।
Padma-vallī-latā-kumbha-patra-darpaṇa-ropitāḥ ॥ (4)
Stambhasya navamāṁśena padma-kumbhāstarāṁ tu ।
Stambha-tulyā tulā proktā hīnā chopatulā tataḥ ॥ (5)
Tri-bhāgeneha sarvatra chatur-bhāgena vā punaḥ ।
Hīnaṁ hīnaṁ chaturthāṁśāt tathā sarvāsu bhūmishu ॥ (6)

These verses are almost identical in the *Bṛihat-saṁhitā* (LIII, 27-30) ; *see* below :

(8) *Bṛihat-saṁhitā* (LIII, 27-30, *J. R. A. S.*, N. S., vol. VI, p. 285, notes 1, 2) :

Uchchhrayāt sapta-guṇād aśīti-bhāgaḥ prithutvam eteshām ।
Nava-guṇite aśītyaṁśaḥ stambhasya daśāṁśa-hīno'gre ॥ (27)

'The eightieth part of nine times the altitude (of the storey) gives the width of a column at the bottom; this diminished by one-tenth is the width of the column at the top.' Kern.

Sama-chatur'aśro ruchako vajro'shṭāśrir dvi-vajrako dvi-guṇaḥ।
Dvā-triṁśāśras tu madhye pralīnako vṛitta iti vṛittaḥ॥ (28)

A column with four sides equally rectangular (*lit.* of four equal corners) is called Ruchaka (=beautiful); one with such eight sides is called Vajra; one with such sixteen sides is called Dvi-Vajra: one with such thirty-two sides at the middle (i.e., by the shaft) is called Pralīnaka; and a round one is called Vṛitta.

Stambhaṁ vibhajya navadhā vahanaṁ bhāgo ghaṭo'sya bhāgo' nyaḥ।
Padmaṁ tathottaroshṭhaṁ kuryād bhāgena bhāgena॥ (29)

Cf. Commentary quotes *Kiraṇa-Tantra* (? *Kiraṇāgama*):

Vibhajya navadhā stambhaṁ kuryād udvahanaṁ ghaṭam।
Kamalaṁ chottaroshṭhaṁ tu bhāge bhāge prakalpayet॥

'When you divide the whole column into nine parts, one part would be the pedestal (?); the second, the base (?). The capital(?) and also the upper lip(?) must be made so as to form one part, each of them.' (*See* below.)

'All this exceedingly vague.' Kern.

Stambha-samaṁ bāhulyaṁ bhāra-tulānām upary upary āsām।
Bhavati tulopatulānām ūnaṁ pādena pādena॥ (30)

'Equal to the thickness of the column is that of the architraves; the thickness of the superior cross-beams and upper rafters is lessened by one-quarter, again and again.' Kern.

The eight component parts of the column (order) mentioned in the *Matsya-Purāṇa*, *Bṛihat-saṁhitā*, and *Kiraṇa-tantra* are (1) vahana, (2) ghaṭa, (3) padma, (4) uttaroshṭha, (5) bāhulya, (6) bhāra (? hāra), (7) tulā, and (8) upatulā.

Dr. Kern's conjectural rendering of these terms does not seem tenable. Nothing can, however, be stated with certainty about their identification. But there is a very striking similarity between the number (eight) of the mouldings, of which the Indian and the Greco-Roman orders are composed. (*See* below).

(9) Saṁgraha-śiromaṇi by Sarayū Prasāda (xx, 132–134), cites the same three verses from *Varāha-mihira* (B. S. LIII, 28-30) as quoted above.

(10) 'The subservient parts of an order, called mouldings, and common to all the orders, are eight in number. They are—

(i) The ovolo, echinus, or quarter round (Fig. 867). It is formed by a quadrant, or sometimes more of a circle, but in Grecian

examples its section is obtained by portions of an ellipse or some other conic section. This latter observation is applicable to all mouldings of Greek examples, and we shall not repeat it in enumerating the rest of them. It is commonly found under the abacus of capitals. The ovolo is also almost always placed between the corona and dentils in the Corinthian cornice; its form gives it the appearance of seeming fitted to support another member. It should be used only in situations above the level of the eye.

(ii) The talon, ogee, or reversed cyma (Fig. 868) seems also, like the ovolo, a moulding fit for the support of another.

(iii) The cyma, cyma recta, or cymatium (Fig. 869) seems well contrived for a covering and to shelter other members. The cyma recta is only used properly for crowning members, though in Palladio's Doric, and in other examples, it is found occasionally in the bed mouldings under the corona.

(iv) The torus (Fig. 870), like the astragal presently to be mentioned, is shaped like a rope, and seems intended to bind and strengthen the parts to which it is applied; while,

(v) The scotia or trochilos (Fig. 871), placed between the fillets which always accompany the tori, is usually below the eye; its use being to separate the tori, and to contrast and strengthen the effect of other mouldings as well as to impart variety to the profile of the base.

(vi) The cavetto, mouth or hollow (Fig. 872) is chiefly used as a crowning moulding like the cyma recta. In bases and capitals it is never used. By workmen it is frequently called a casement.

(vii) The astragal (Fig. 873) is nothing more than a small torus, and, like it, seems applied for the purpose of binding and strengthening. The astragal is also known by the names of bead and baguette.

(viii) The fillet, listel or annulet (Fig. 874) is used at all heights and in all situations. Its chief office is the separation of curved mouldings from one another.

(Gwilt, *Encycl. of Arch.*, art., 2532; *see* also Gloss. Grecian Arch., plates xxxiv, xxxiv, bis.)

(Attention of the reader should also be drawn to another striking affinity between the Indian and the Greco-Roman orders: in both cases they are principally five in number: *see* details below.)

Whatever be the reasons of these affinities, chance or influence, some of the eight mouldings of an Indian order may be identified with an amount of certainty with the corresponding mouldings of the Greco-Roman order. Padma means lotus and it is same as cyma. Uttaroshṭha, literally lower lip, and cavetto, mouth or hollow, are apparently the same.

Bhāra is read as hāra (in the *Mānasāra*) meaning a chain, and the latter expression implies the torus, bead or astragal. Ghaṭa might correspond to conge, Vahana to abacus, and Tulā and Upatulā (also called vājana and uttara) to fillet or listel.

(11) Pillar with Garuḍa bird on the top (Badal Pillar inscrip., v. 27, *Ep. Ind.*, Vol. II, pp. 164, 167).

(12) Thambhāni (Pillar Edicts of Aśoka, no. VII, *Ep. Ind.*, Vol. II, p. 270).

(13) Stambhatvaṁ . . . Śrī-śailam evānayat—' Converted the Śrī-śaila into a pillar.'—(Vanapalli Plates of Anna-vema, v. 10, *Ep. Ind.*, Vol. III, pp. 61, 64.)

(14) Pillar (Deogaḍh Pillar inscrip. of Bhojadeva of Kanauj, lines 6, 9, *Ep. Ind.*, Vol. IV, p. 310).

(15) Tri-śūla-mudrāṁkaḥ svakīyāyatana-dvāre mahā-śaila-stambhaḥ।

' The pillar is (now) called the Lakshmī Kambha, or the pillar of (the (goddess) Lakshmī.

' The upper part of the pillar is ocatgonal (and this part contains the inscription). Immediately below the inscription, the pillar is square. It is stamped with the mark of the tri-śūla or trident, which is the weapon of Śiva, was set up in the middle of the three shrines by a sculptor named Śubhadeva.'—(Pattadakal inscrip. of Kirtivarman II, line 18, *Ep. Ind.*, Vol. III, pp. 1, 3, 5, 7.)

(16) A four-faced pillar made of stone (A. D. 1250) now " lying in the temple of Veṇugopāla in the Kistna District."—(Yenamadal inscrip. of Ganapamba, *Ep. Ind.*, Vol. III, pp. 94, 96.)

(17) ' This inscription (Śrāvaṇa-Belgola Epitaph of Mallisena, Śaka, 1050) is on four faces of pillar on a hill at Śrāvaṇa-Belgola in Mysore.'

(*Ep. Ind.*, Vol. III, p. 184.)

(18) Śilā-stambha—stone pillar, (?) solid.

(Śrāvaṇa-Belgola Epitaph of Mallisena, v. 9, *Ep. Ind.*, Vol. III, pp. 190, 186.)

(19) Used in the sense of daṇḍa (a measure) :

Triṁśat-stambha-pramāṇa-pushpa-vāṭikā।

(Bamani inscrip. of Silhara Vijayaditya, line 22, *Ep. Ind.*, Vol. III, p. 213.)

(20) ' At the eastern entrance of this temple (named Kunti-Mādhava at Pithapuram, in the Godavari District) in front of the shrine itself, stands (still) a quadrangular stone pillar.'—(*Ep. Ind.*, Vol. IV, p. 32.)

(21) ' The (Salotgi) pillar is inscribed on all its four faces : on the front or the first face, above the writing, are some sculptures, towards the top a liṅga, and below it a cow and a calf and something else which has been defaced.'—(*Ep. Ind.*, Vol. IV, p. 57.)

(22) Śilā-thabe cha usapāpite—'he caused a stone pillar to be erected.'—(The Aśoka Edicts of Paderna, line 3, *Ep. Ind.*, Vol. v, p. 4.)

(23) 'The Vishṇu temple of Kūrmeśvara at Śrīkūrman near Chicalcole in the Ganjam District contains many inscribed pillars of hard black stone which have successfully withstood the influence of the climate.'—(*Ep. Ind.* Vol. v, p. 31.)

(24) Chakre . . . Vijaya-stambham ambhodhi-tīre ||
Puṇye sahyādri-śṛiṁge tri-bhuvana-vijaya-stambham ||
(Four inscrip. of Kulottunga-Chola, no. A, vv. 1, 2, *Ep. Ind.*, Vol. v, p. 104).

(25) 'This inscription (Śrāvaṇa-Belgola Epitaph of Marasimha II) was engraved on the four faces of the base of a pillar, which is known as the Kuge-Brahma-deva-Kambha, at the entrance to the area, occupied by the temples on the Chandragiri hill at Śrāvaṇa-Belgola.'
(*Ep. Ind.*, Vol. v, p. 151.)

(26) Māna-stambha (Śrāvaṇa-Belgola Epitaph of Marasimha II, line 109).
(*Ep. Ind.*, Vol. v, pp.178, 171, note 5.)

'The word "Māna-stambha", which means literally "a column of honour", is explained by Mr. Rice (Inscrip. at Śrāvaṇa-Belgola, Introduction, p. 19, note 2) as denoting technically "the elegant tall pillars, with a small pinnacled maṇṭapa at the top, erected in front of the Jain temples" and he refers us to a discussion regarding them in Fergusson's *Indian and Eastern Architecture*, p. 276.' Dr. Fleet (*see* below).

(27) Māna-sthambha—Jaina pillar (Krishṇa Śastri refers also to *Ep. Ind.*, Vol. v, p. 171, note 5).

'The Mānastambhas, which are generally graceful, high and imposing, have to be distinguished from other Jaina pillars neither so tall as the former nor bearing any maṇḍapas on their tops. These latter are called Brahma-deva-pillars (*cf.* Brahma-kānta, in the *Mānasāra*) and appear to be usually set up in front of colossal statues. The Tyāgada-Brahma-deva pillar (figured on plate facing p. 33 of the Introduction to Mr. Rice's Śrāvaṇa-Belgola inscriptions) is set up opposite to the collosal statue on the Doḍḍa-beṭṭa hill at Śrāvaṇa-Belgola; the Kūge Brahma-deva pillar at the entrance into the bastis on the Chikkapeṭṭa hill of the same village, indicates perhaps the existence of the unfurnished colossus on that hill (*ibid.*, p. 29, note 1), and the colossi at Kārkala and Veṇūr have similar pillars in front of them, bearing an image of Brahma-deva on their tops (Government Epigraphist's Annual Report for 1900–1901, paragraphs 6 and 7).'

'A lithograph of a similar pillar at Veṇūr is given in *Ind. Ant.*, Vol. v, plate facing p. 39.'—(Kārkala inscrip. of Bhairava II, *Ep. Ind.*, Vol. vi i, p. 123, note 2.)

(28) Trai-lokya-nagarārambha-mūla-stambhāya sambhave ।

'He is the foundation-pillar for the erection of the city of the three worlds.'—(Inscrip. at Ablur, no. E, line 1, *Ep. Ind.*, Vol. v, pp. 245, 252.)

(29) 'It (Śrīkūrmam inscrip. of Nara-hari-tīrtha) is inscribed on the east and north faces of one of the black granite pillars, which support the hall enclosing the temple.'—(H. Krishṇa Śastri, *Ep. Ind.*, Vol. vi, p. 260.)

(30) Siha-thabo—lion pillar (no. 1).

Sihadhayāna-thambho (no. 7).

Sasariro thabo—pillar containing relics (Senart).—(Karle Cave inscrip. nos. 1, 7, 9, also 8, 11, *Ep. Ind.*, Vol. vii, pp. 49, 53, 54, 55, 56.)

(31) Chañchat-kīrtti-patākayā tilakita-stambhaḥ pratishṭhāpitaḥ ।

Yasyāgre Garuḍa . . . 'All erected the famous pillar adorned with a waving banner of fame . . . the Garuḍa at the top.'

(Two inscrip. of Tammusiddhi, no. A, Tiruvalabgadu inscrip., v. 12, *Ep. Ind.*, Vol. vii, pp. 123, 125.)

(32) 'The inscription (Śrāvaṇa-Belgola inscription of Trugapa) is engraved on three faces of a quadrangular pillar behind the image of the Kūshmāṇḍinī Yakshī which is set up in the Brahma-deva-maṇḍapa in front of the Gummata temple on the Vindhyagiri at Śrāvaṇa-Belgola.'

(Dr. Lüders, *Ep. Ind.*, Vol. viii, p. 15.)

(33) 'According to Mr. Rice, the inscription (Talagunda pillar inscription of Kakusthavarman) is engraved on a pillar of very hard grey granite, which stands in front of the ruined Prabhaveśvara temple at Talagunda, in the Shikarpur Taluk of the Shimoga District of the Mysore State. The pedestal of the pillar is 5 feet. 4 inches high and 1 foot 4 inches at the top, a little more at the base. The shaft is ocatgonal, 6 feet 4 inches high ("judging by the length of the lines, the shaft must really be slightly higher"). Each face being 7 inches wide, but tapering slightly towards the top.'

(Prof. Kielhorn, *Ep. Ind.*, Vol. viii, p. 24.)

(34) 'Alupa inscriptions nos. i–viii are engraved on ocatognal pillars in front and in the courtyard of the Śambhukallu temple at Udiyāvara.'

(*Ep. Ind.*, Vol. ix, p. 17 f.)

(35) Stambho'yaṁ nagarasya—'this is the city pillar.'

(Kanker inscrip. of Bhanudeva, v. 6, *Ep. Ind.*, Vol. ix, p. 126.)

(36) In 1848 Captain J. D. Cunningham (in. *J. R. A. S.*, Bengal, Vol. xvii, part 1, p. 305 ff) proceeds thus: 'near to the western edge of the similar lake stands the wand or pillar (in the town of Pithari in the Bhopal Agency of Central India) now called Bheem Sen. It is composed of a single block about 30 feet. in height and 2½ thick. The shaft is square in section, for a height of 8 feet, and it then becomes circular.'

In 1880 General Sir A. Cunningham (in his *Archaeological Survey of India*, Vol. x, p. 70), noticed thus : ' Inside the town on the top of the slope, there is a tall monolith with a bell-shaped capital. The shaft is circular, rising from a base 8 feet 3 inches high and 2 feet 9 inches square . . . and from their (of the letters of the inscription on the pillar) shapes I would assign the monument to somewhere about A.D. 600. Close by this pillar there is a small temple with Vishṇu sitting on Garuḍa over the door-way.'

The main object of the inscription is to record the erection of the pillar of which a vivid description is given.

(Pathari Pillar inscrip. of Parabala, vv. 24–28, *Ep. Ind.*, Vol. IX, pp. 254, 248, 249, 250.)

(37) ' In front of the temple is an inscribed quadrangular pillar of black granite bearing in relief within a countersunk square at the top of each of its four faces, the figure of a squatting Jaina ascetic with his arms folded over his lap crosswise.'

' The thousand-pillared temple in the middle of the village of Anmakoṇḍa was built by Prola's son Rudra in or about A. D. 1162–1163 (*Ind. Int.*, vol. XI, p. 9 f.).'

(Anmakonda inscrip. of Prola, *Ep. Ind.*, Vol. IX, pp. 257, 256, note 8.)

(38) ' The first verse (quoted below) invokes the blessings of Vināyaka (Gaṇapati) who, we are told, was placed on the column to ensure prosperity at the top by a quadruple image of Gaṇapati, facing the cardinal directions.'

Siddhiṁ karotu sarvvattra stambha-dhāma-Vināyakaḥ ।

(Ghatiyala inscrip. of Kakkuka, no. II, v. 1, *Ep. Ind.*, Vol. IX, pp. 280, 278–279.)

(39) Kamanīya-śilā-stambha-kadambottamvītāṁvaram ॥
Viśaṁkaṭaviṭaṁkālī-virājad raṁga-maṁṭapam ॥

' It (the temple) has a large Raṅga-maṇḍapa raised on a collection of beautiful stone pillars and adorned with rows of spouts.'—(Krishṇapuram Plates of Sadāśivaraya, v. 55–56, *Ep. Ind.*, Vol. IX, pp. 336, 341.)

(40) ' The two (Nalamba inscriptions from Dharamapuri of the ninth century A. D.) are engraved on the four faces of a pillar, which was removed in 1904 from Dharmapuri in the Salem District to the Madras Museum.'

' The pillar measures 5′ 4½″ by 1′ 4″ on the east face, 5′ 6½″ by 1′ 4″ on the west and 5′ 5½″ by 1′ 3″ on the north and south faces. It is surmounted by a pinnacle from which proceed in the eight directions eight petals, which open downwards and are slightly raised at the edges where they meet the margins of the pillar . . . The pillar was built into the floor of a maṇḍapa, in front of the Mallikārjuna temple at old Dharmapura.'—(H. Krishṇa Śastri, *Ep. Ind.*, Vol. X, p. 54.)

(41) Mātṛi-pada-śrī-nimitte staṁbhakaḥ pradattaḥ—'the pillar was presented in memory of (their) mother.'—(The Chahamanas of Marwar, no. xvii, Saṇḍerav stone inscrip. of Kelhanadeva, line 1, *Ep. Ind.*, Vol. xi, p. 52.)

(42) Tenānena Śrī-gaṇapati-deva-mahā-rājena sakala-dvīpāṁta-rīpa-deśāṁtara-paṭṭaneshu gatāgataṁ kurvvāṇebhyaḥ sāmya-kṛitebhya evam abhayaśāsanaṁ dattam।

Gaṇapati-devaḥ kīrtyai sthāpitavāṁś chhāsana-staṁbham ॥

'By this glorious Mahārāja Gaṇapati-deva the following edict (assuring) safety has been granted to traders by sea starting for and arriving from all continents, islands, foreign countries, and cities . . . Gaṇapati-deva set up for the sake of glory (this) edict-pillar.'

(Motupalli pillar inscrip. of Gaṇapati-deva, lines 135–140, v. 28, *Ep. Ind.*, Vol. xii, pp. 195, 196, 197.)

(43) Agrya-dhāma-śreyaso veda-vidyāvallīkandaḥ svaḥ sravantyāḥ kirītam।

Vra(bra)hma-stambho yena karṇṇāvatīti pratyashṭhāpi kshmā-tala-brahma-lokaḥ ॥

'He set up the pillar of piety, called Karṇāvatī, the foremost abode of bliss, the root of the creeping plant, knowledge of the Vedas, the diadem of the stream of heaven, the world of Brahman on the surface of the earth.'

(Khairha plates of Yaśaḥkarṇadeva, v. 14, *Ep. Ind.*, Vol. xii, pp. 212, 216.)

(44) Kīrti-stambhaṁ (pillar of victory) nikhāya tri-bhuvana-bhavana-stūyamānāpadānaḥ।

(Conjeeveram plates of Krishṇadeva-Raya, Śaka 1444, v. 9, *Ep. Ind.*, Vol. xiii, p. 127.)

(45) Sthāpayitvā dharaṇi-dharamayān sannikhātas tato'yaṁ śaila-stambhaḥ su-chārur giri-vara-śikharāgropamaḥ kīrtti-karttā ॥

'There was then planted in the ground this most beautiful pillar of stone, which resembles the tip of the summit of the best of mountains, (and) which confers fame (upon him).'

(Kahaum stone pillar inscrip. of Skandagupta, lines 11–12, *C. I. I.*, Vol. iii, F. G. I., no. 15, pp. 67, 68.)

(46) Dhvaja-stambha, also called simply 'dhvaja':

Mātṛi-(tā)pittroḥ puṇya-pyāyanārtham esha bhagavataḥ puṇṇya-janārddanasya Janārddanasya dhvaja-stambho'bhyuchchhritaḥ ॥

'This flag-staff of the divine (god) Janārdana, the troubler of the demons, has been erected, for the purpose of increasing the religious merit of (their) parents.'

Vishṇu-pada girau bhagavato vishṇor dhvajoḥ sthāpithaḥ।

'This lofty standard of the divine Vishṇu was set up on the hill (called) Vishṇupada.'—(Eran stone pillar inscrip. of Budhagupta, lines 8–9;

Meharauli posthumous iron pillar inscrip. of Chandra, line 6, *C. I. I.*, Vol. III, F. G. I., nos. 19, 32, p. 89 and note 1, 90; 141, 142.)

(47) 'The original lower part of the pillar (at Eran) is now broken away and lost; the remnant of it is about 3′ 11″ high and 1′ 6″ in diameter. The hollow part is octagonal; and the inscription (Eran posthumous stone pillar inscription of Goparaja, no. 20) is at the top of this octagonal part, on three of the eight faces, each of which is about 7″ broad . . . Above this the pillar is sixteen-sided. Above this, it is again octagonal; (and the faces here have sculpture of men and women, who are probably intended for the Goparaja of the inscription and his wife and friends; the compartment immediately above the centre of the inscription represents a man and a woman, sitting, who must be Goparaja and his wife). Above this, the pillar is again sixteen-sided. Above this, it is once more octagonal . . . Above this the pillar curves over in sixteen flutes or ribs, into a round top'.

'As noted by Cunnigham, there are several other Sati-pillars (in commemoration of a Satī), but of much later date than at Eran.'—(*C. I. I.*, Vol. III, no. 20, pp. 91, 92, note 2.)

(48) The boundary-pillar:

Śiva-dāsena vala-yashṭi uchchhritaḥ—(this) boundary-pillar has been set up by Śivadāsa.'—(Bhumara stone pillar inscrip. of the Maharajas Hastin and Sarvanatha, lines 6–7, *C. I. I.*, Vol. III, F. G. I., no. 24, pp. 111, 112.)

(49) 'The inscription (Meharauli posthumous iron pillar inscription of Chandra, no. 32) is on the west side of a tapering iron column, sixteen inches in diameter at the base and twelve at the top, and twenty-three feet eight inches high, standing near the well known Kutb Minar in the ancient fort of Rāy Pithara.'—(*C. I. I.*, Vol. III, F. G. I., no. 32, p. 140.)

(50) Tenākalpānta-kālāvadhir avani-bhujā Śri-Yaśodharmmaṇāyaṁ, sthambhaḥ sthambhābhirāma-sthira-bhuja-parigheṇochchhritiṁ nāyito'ttra ||.

This is one of the two Raṇa-stambhas or columns of victory in war at Mandasor. Their architectural characteristics are given by Dr. Fleet:

Of the first one he says 'The base of it is rectangular, about 3′ 4″ square by 4′ 5″ high . . . From this base there rises a sixteen-sided shaft, each of which is about 8½″ broad, where it starts from the base . . . The total length of which (the shaft) was thus about 39′ 3″ or 34′ 10″ above the base . . . The next part of this column, the lower part of the capital, . . . is a fluted bell, about 2′ 6″ high and 3′ 2″ in diameter, almost identical in design with the corresponding part of a small pillar from an old Gupta temple at Sanchi, drawn by General Cunningham (in the

Arch. Surv. Ind., Vol. x, plate xxii, no. 1 . . .). The total length of this column, up to the top of the lion-capital, is about 44′ 5″, or forty feet above the ground, if it stood with the entire base buried. The square lion-capital must have surmounted by a statue or statues, of the same kind as that which stands on the summit of the column at Eran.'—(*See* above and *Arch. Surv. Ind.*, Vol. x. p. 81 and plate xxvi.)

'The base (of the other column about 20 yards north) is rectangular, about 3′ 3″ square by 3′ 11″ high. Differing from the first column, the base is followed by a concave circular part, about 1′ 0″ high . . , From this there rises a sixteen-sided shaft, each face of which is about 8″ broad, where it starts from the base . . . This column also tapers slightly from bottom to top . . . the fluted bell part of the capital, about 3′ 0″ high and 3′ 3″ in diameter (is) similar in design to the same part of the capital of the other pillar . . . the top has one circular and eight rectangular socket-holes, just as in the top of the lion-capital of the first column.'

'The two inscribed columns were evidently intended as a pair, though the full view of the second cannot be taken. (From the distance between them, from the difference in the detailed measures, and from the analogous instance of the Eran column, as shewing the way in which they must have been finished off at the top, they can hardly have been connected by a beam, after the fashion of a toraṇa or arched gateway; and there are no traces of any temple to which they can have belonged). They are evidently an actual instance of two Raṇa-stambhas or "columns of victory in war," such as the Kauṭhem grant of Vikramāditya V (*Ind. Ant.*, Vol. xvi, p. 18) . . . speaks of as having been set up by the Rāshṭṭrakūṭa king Karkara or Kakka III, and as having then been cut asunder in battle by the western Chalukya king Taila II.'—(*C. I. I.*, Vol. iii, F. G. I., no. 33, line 7, pp. 147, 143 f.)

(51) 'The inscription (Pahladpur stone pillar inscription, F. G. I., no. 57) is on a sandstone monolith column about 3 feet in diameter, polished and rounded for a length of 27 feet; with a rough base of 9 feet, the total length being 36 feet . . . in or about 1853 removed to Benares and set up in the grounds of the Sanskrit College there.'

(*C. I. I.*, Vol. iii, F. G. I., no. 57, p. 249 f.)

(52) Kṛitau puṇḍarīke yūpo'yaṁ pratishṭhāpitas . . . Varikeṇa।

'On the ceremony of the Puṇḍarīka sacrifice (having been performed), this *sacrificial* post has been caused to be set up by the Varika.'

The architectural characteristics of this (*sacrificial*) column are given by Dr. Fleet: 'The pillar (Bijayagadh stone pillar inscrip. of Vishṇuvardhana of A.D. 372) stands on a rubble masonry platform (which is

plainly of much more recent construction than the pillar itself), which is about 13′ 6″ high and 9′ 2″ square at the top. The height of the pillar above the plinth is 26′ 3″. The base is square, to the height of 3′ 8″, each face measuring 1′ 6″. Above this, the pillar is octagonal, for a length of 22′ 7″, and it then tapers off to a point. The extreme top is however broken; and a metal spike, which projects from it, indicates that it was originally surmounted by a capital on the south side of the pillar, towards the top of the square base there is engraved a Śrīyogī Vra(Bra)hma-sāgara (the holy ascetic, Brahma-sāgara).'

This may be compared with the Brahma-kānta column of the *Mānasāra*,

(Bijayagadh stone pillar inscrip. of Vishṇu, vardhana, line 3, *C. I. I.*, Vol. II, F. G. I., no. 59, pp. 253, 252.)

(53) Sphārā kūpāra-tīrāvāḷi-nihita-jaya-stambha-vinyasta-kīrttiḥ |

' Who has deposited his fame in pillars of victory, which he erected in an uninterrupted line on the shore of the great ocean.'

(Vijayanagara inscrip. of Devaraja II, v. 5, *H.S.I.I.*, Vol. I, no. 153, pp. 163, 165.)

(54) Śakra-pratāpas tri-bhuvana-vijaya-stambham ambhodhi-tīre ||
Puṇye sahyādri-śriṅge tri-bhuvana-vijaya-stambham ambhodhi-pāre |

(Tiruvallam inscrip. of Rajaraja, v. 1, 2, *H.S.I.I.*, Vol. I, no. 155, p. 168.)

(55) Trailokya-nagarārambha-mūla-stambhāya Śambhave ||

' Adored be Śiva, the original foundation-pillar of the city of the three worlds.'—(*Ep. Carnat.*, Vol. I, no. 11, pp. 35, 57, first para.)

(56) Hire-chavuṭiya-Rāmeśvara-devara-guḍiya-kallu-kelasa mādisi dīpa-māle-kambada—' had the temple of Rāmeśvara in Hire-Chavuṭi built of stone and erected a dipa-māle pillar.'—(*Ep. Carnat.*, Vol. VIII, Part I, Sorab Taluq, no. 238; Roman text, p. 77; Transl., p. 37.)

(57) ' When Śivappa-Nāyaka was protecting the kingdom in righteousness (on a date specified), through the agency of Siddha-Basappayyā of the treasury, this dhvaja-stambha (or flag-staff) was set up.'

(*Ep. Carnat.*, Vol. VIII, Part I, Sagar Taluq, no. 38; Transl., p. 97.)

(58) ' In order that they both might acquire merit (the couple), informed the guru that they would erect a māna-stambha in front of the Nemiśvara chaityālaya which their grandfather, Yojana Śreshṭhi, had built. . . . On a propitious day they carried out their promise and had a pillar of bell-metal made. Meanwhile, to Devarasa were born twin daughters, Padmarasi and Devarasi, and taking that as an auspicious omen, they had the bell-metal pillar, which had been made, set up in front of the chaityālaya. And upon the pillar they fixed a golden kalaśa of the same height as that of the twins, Padmarasi and Devarasi.

'To describe the māna-stambha :—In dimension like a mast of the great ship of dharma and in the midst of the group (of temples) the māna-stambha (towered up) as if gathering the constellations in the sky like flowers with which to worship the feet of the four Jaina images.'

'In front of Nemiśvara Jina's temple, a māna-stambha of polished bell-metal, with a golden kalaśa, on the instruction of Abhinava-Samantabhadra-Nāgappa-Śreshṭhi's son, Ambvaṇa-Śreshṭhi caused to be mads a rod for the umbrella of dharmma. Thus did they have the māna-stambha made.'

(*Ep. Carnat.*, Vol. VIII, Part 1, Sagar Taluq, no. 55 ; Roman text, p. 192 f. ; Transl., p. 102, last two paras.)

(59) 'When the Mahāmaṇḍaleśvara Śāluvendra-mahārāja, without any enemies, was ruling the kindgom in peace :—with beautiful lofty chaityālayas, with groups of maṇḍapas, with māna-stambhas of bell-metal with pleasure-groves for the town, with many images of metal and stone.

(*Ibid.*, no. 163 ; Roman text, p. 234, line 27 ; Transl., p. 124.)

(60) 'Glorious with a māna-stambha, a lotus pond and a moat.'

(*Ep. Carnat.*, Vol. VIII, Part 1, Tirthahalli Taluq, no. 166 ; Transl., p. 196, second para.).

(61) Dīpa-māleya-kambha—lamp-stand-pillar.—(*Ibid.*, Sagar Taluq, no. 60 ; Roman text, p. 194, third line from the bottom upwards, and p. 103 ; Transl., p. 103, second para.)

(62) 'Bommanna-seṭṭi's son Māchirūśa-seṭṭi had this dīpamāle pillar (dīpa-māleya-kambhakke) made.'

This inscription is 'at the base of Garuḍa-kambha in front of the Gopāla-Kṛishṇa temple in the fort.'—(*Ep. Carnat.*, Vol. IX, Bangalore Taluq, no. 16, Transl., p. 7 ; Roman text, p. 9.)

(63) 'Heggunda Baira-Dāsa's son Māra-Dāsa, for the god Śiva-gangenātha, on the rock in front of the Māchaśāle set up this dīpamāle pillar.' (Kambha).—(*Ibid.*, Vol. IX, Nelamangala Taluq, no. 37 ; Roman text p. 59 ; Transl., p. 49.)

(64) 'Chika-Ankiya-Nāyaka, from love to the god Tirumalenātha, set up in front of it this dīpamāle pillar' (Kambha).—(*Ibid.*, Vol. IX, Devanhalli Taluq, no. 40 ; Roman text, p. 97 ; Transl., p. 79.)

(65) 'Chandalir-Deva-rāvutta had this dīpamāle pillar made for the god of Varadarāja of Vogaṭṭa.'—(*Ibid.*, Vol. IX, Hoskote taluq, no. 131 ; Roman text, p. 128 ; Transl., p. 104.)

(66) 'Who (Śrī-Rājendradeva), having conquered the Iraṭṭapāḍi seven and a half lakh (country), set up a pillar of victory (jaya-stambha) at Kollāpuram.'—(*Ep. Carnat.*, Vol. X, Kolar Taluq, no. 107 ; Roman text, p. 35 ; Transl., p. 35.)

(67) ' Had this māna-stambha made.'—(*Ibid.*, Mulbagal Taluq, no. 59 ; Transl., p. 91.)

(68) ' Set up the yūpa-stambha for the Sarvapṛishṭha and Āptoryāma (sacrifices).'—(*Ibid.*, Vol. x, Bagehalli Taluq, no. 17 ; Transl., p. 233.)

(69) ' Those who did the work (Devāmbudhi tank) :

Gaṇṭemadana Basavana made the pillars (kambha), Komaraiya the ornamental work, and the stone-veḍḍa Chenne-Boyi built the stones of the embankment.'—(*Ep. Carnat.*, Vol. xii, Tumkur taluq, no. 24 ; Transl., p. 8, para. 2.)

(70) Harmya-mūla-stambhanum—' foundation pillar of the palace.'
(*Ibid.*, Gubbi Taluq, no. 13 ; Roman text, p. 36, second line of the first prose portion ; Transl., p. 19, para. 3.)

(71) Liṅga-mudre-stambha—' pillar marked with the liṅga."
(*Ibid.*, Vol. xii, Tiptur Taluq, no. 108 ; Roman text, p. 102 ; Transl., p. 64.)

(72) ' We have had the village built, set up (the god) Saṅjīvarāya, erected this Garuḍa-Kambha, and had this tank and well constructed.'
(*Ibid.*, Sira Taluq, no. 92 ; Transl., p. 101, line 2 f.)

(73) ' The roof of this hall is supported by four very elaborately carved columns, nearly square at the base, changing into octagons at a little above one-third their height. The capitals are circular under square abaci. These again are surmounted by square dwarf columns terminating in the usual bracket capitals of the older Hindu works.'
(The temple of Amarnath, *Ind. Ant.*, Vol. iii, p. 317, c. 2, para. 1, middle.)

(74) Mālākārāya Mugu (pālitasya de)yadharmaḥ stambhaḥ ||
' This pillar is the benefaction of the gardener Mugupālita.'
(*Ind. Ant.*, Vol. vii, Kuda inscrip., no. 9, pp. 256–257.)

(75) ' This inscription (Inscriptions from Nepal, no. 1, dated Samvat 386) is incised on the lower part of the broken pillar placed to the left of the door of the temple of Chaṅgu-Nārāyaṇa, about five miles to the north-east of Kāṭmāṇḍu. The pillar about 20 feet high is without the capital. Its lower half is square, half of the upper part is octagonal, higher up it becomes sixteen-cornered and finally round. Originally it was crowned by a lotus-capital surmounted by a Garuḍa, about 4 feet high, shaped like a winged man kneeling on one knee. The workmanship is very good, and the figure shews the flowing locks, which occur frequently on the sculptures of the Gupta period.' Pandit Bhagwanlal Indraji and Dr. G. Bühler.—(*Ind. Ant.*, Vol. ix, p. 163, c. 1, para. 2.)

(76) ' Just outside the south-west gate of the village there is a modern shrine of the god Hanumanta, with a stone dhvaja-stambha standing in

front of it. Into the pedestal of this dhvaja-stambha there has been built a virgal on monumental stone.' Dr. Fleet.—(Sanskrit and Old Canarese inscrip., no. LXIX, *Ind. Ant.*, Vol. IX, p. 96.)

(77) ' There stands a monolith pillar (on which the inscription referred to below is engraved) apparently of red sandstone. The pillar is called Lakshmī-Kambha or the "pillar of the goddess Lakshmi," and is worshipped as a god.'

' The upper part of the pillar is octagonal. Below the octagonal part of the pillar is a square four-sided division.'

(*Ibid.*, no. CXI, *Ind. Ant.*, Vol. X, pp. 168, 169.)

(In villages of eastern Bengal there is a custom to call one of the pillars in the house of each family, the Lakshmi pillar and to worship it as a god.)

(78) ' The central tower or compartment of each face is ornamented simply by sixteen-sided pilasters at the angles . . . the pilasters are octagonal, whilst the outer compartments or towers at the four corners of the temple have plain square pillars and pilasters.'—(Gangai-Konda-puram Śaiva Temple, *Ind. Ant.*, Vol. IX, p. 117, c. 2.)

(79) Bhagvato Budhasa puva-dāre áyakakaṁ 5 sava niyute apaṇo deyadhaṁma savatāṇa hata-sukhāya patiṭhāpitatī (no. I, line 5–6).

Bhagavato Budhasa mahā-chetiya (puva) dāre āya(ka)-khaṁbhe paṁcha 5 savamyute āpaṇo deyadhaṁmaṁ (no. II, line 6.)

Bhagavato Budhasa mahā-chetiya puva-dāre āyaka-khambhe save niyute apaṇo deyadhaṁma sava-satānaṁ hita-sukhāya patiṭhāvitati ||

' Erected near the eastern gate of divine Buddha, five (5) Ayaka-pillars which were dedicated for the good and the welfare of all living beings.

' I am unable to say at present what is meant by the epithet ayaka or āyaka. It is possible to connect it either with āryaka " venerable " or with ayas " iron, metal." But I think it more likely that the word has some technical meaning. Dr. Bühler.

' I would suggest " lofty " or " frontal " ; they were pillars about 16 feet high, erected on the east front of the stūpa, exactly as represented on the Amarāvati slabs bearing representations of stūpas.' Dr. Burgess.

(Inscrip. from Jaggayyapetta, nos. I, II, III, *Ind. Ant.*, Vol. XI, pp. 258, note 5 : 259.)

(80) Prathama-vihita-kīrtti-prauḍha-yajña-kriyāsu pratikṛitim iva navyāṁ maṁḍape yūpa-rūpām |

Iha Kanakhala-Śambhoḥ sadmani stambha-mālām amala-kashaṇa-pāshāṇasya sa vyātatāna ||

' He erected in the maṇḍapa of this temple of Kanakhala-Śambhu a row of pillars made of pure black stone and shaped like sacrificial posts,

a modern imitation, as it were (of those which were used) for the high famed sacrifices of yore.'

(An Ābu inscrip. of the reign of Bhimadeva II, v. 12, *Ind. Ant.*, Vol. XI, p. 221, c. 2 ; p. 222, c. 2.)

(81) Thabha, thabhā, thaṁbha, thambhā (pillar, pillars, stambha or sthambhāḥ) gift of some person or persons.—(Bharaut inscrip., nos. 22, 25, 26, 35, 37, 64, 66, 67, 69, 70, 71, 75, 81, 88, 90, 94, 96, 97, *Ind. Ant.*, Vol. XXI, p. 227 f.)

(82) " In one of the inscriptions (the one entitled I, A. of Bhagavanlal and Bühler), the interpretation of which, it is true, is very doubtful, it would seem that reference is made to an army, to war and victory ; and if so, the pillar would have been both a dharma-stambha and a jaya-stambha, a monument of devotion and a trophy of victory.'—(The inscrip. P. on the Mathura lion-capital, *Ind. Ant.*, Vol. XXXVII, p. 245, para. 3, last sentence.)

(83) ' Caused basadis and māna-stambhas to be erected in numerous places.

' Māna-stambha is the name given to the elegant tall pillars with a small pinnacled maṇṭapa at the top erected in front of the Jaina temples.'—(*See* photographs nos. 149, 155, Fergusson, *Ind. and East. Arch.*, pp. 270, 276, and his description quoted below).—(*Ep. Carnat.*, Vol. II, inscrip. on Chandragiri, Śrāvaṇa Belgola, no. 38 ; Transl., p. 121, line 5 ; Roman text, p. 7, line 16 ; Introduction, p. 19, note 2.)

(84) ' The sub-base (of these māna-stambhas, photo nos. 149, 155) is square and spreading ; the base itself is square, changing into an octagon and thence into a polygonal figure approaching a circle ; and above a wide-spreading capital of most elaborate design. To many this may at first appear top-heavy, but it is not so in reality. If you erect a pillar at all, it ought to have something to carry. Those we erect are coped from pillars meant to support architraves and are absurd solicisms when merely supporting statues ; we have, however, not accustomed to them and our eye is offended if anything better proportioned to the work to be done is proposed ; but looking at the breadth of the base and the strength of the shaft, anything less than here exhibited would be found disproportionately small.'

' On the tower or square part of these (māna)-stambhas we find that curious interlaced basket-pattern, which is so familiar to us from Irish manuscripts or the ornaments on the Irish crosses . . . it is equally common in Armenia and can be traced up the valley of the Danube into central Europe ; but how it got to the west coast of India we do not know, nor have we, so far as I know, any indication on which we can rely for its introduction.'

(Under the circumstances, is it not easy and reasonable to give the credit of the invention to the Indian architects ?).

(Fergusson, *Ind. and East. Arch.*, pp. 276, 277.)

(85) Śilā-stambhaṁ sthāpayati sma—' caused a stone pillar to be erected.'—(*Ep. Carnat.*, Vol. II, no. 46 ; Roman text, p. 22, line 5, from bottom upwards ; Transl., p. 127, line 6.)

(86) Tasya Jayastambha-nibhaṁ śilayā stambhaṁ vyavasthāpayati sma Lakshmiḥ—' a stone pillar (for her) as if a pillar of victory, did Lakshmi erect.'—(*Ibid.*, no. 49, last verse ; Roman text, p. 28 ; Transl., p. 128.)

(87) Śrī-Gommaṭa-Jina-pādāgrada chhāgada Kambakke yakshanaṁ māḍisidam—' For the pillar of gifts in front of Śrī-Gommaṭa Jinapa, he had a Yaksha made.'—(*Ep. Carnat.*, Vol. II, no. 110 ; Roman text, p. 86 ; Transl., p. 170.)

(88) ' Bāchappa, son of Kirtti of Aruhanahaḷḷi, on the death of his elder brother Tammarappa, in conjunction with that deva's queen Bayichākkā, had his form engraved on a pillar (kambha) and set it up.'—(*Ep. Carnat.*, Vol. III, Maḷavaḷḷi Taluq, no. 13 ; Transl., p. 56 ; Roman text, p. 116.)

(89) ' The royal karaṇika Devarasa set up in the name of his father . . . a Dīpa-stambha.'—(*Ep. Carnat.*, Vol. IV, Chāmarājnagar Taluq, no. 156, Transl., p. 20.)

(90) ' Made a grant of a Dīpa-māla pillar (kambha) for the god Lakshmī-kānta.'—(*Ep. Carnat.*, Vol. IV, Heggaḍadevankoṭe Taluq, no. 21 ; Transl., p. 70 ; Roman text, p. 117.)

(91) ' He made a brass ornament for the Dhvaja-stambha (flagstaff) of the goddess Mahālakshmī and the goddess Sarasvatī of Kannambāḍi.'—(*Ep. Carnat.*, Vol. IV, Krishṇarājapeṭ Taluq, no. 23; Transl., p. 103.)

(92) ' The great minister caused to be erected a dīpti-stambha for the Kṛittikā festival of lights (Kṛittikā-dīpotsavake dīpti-stambha) and a swing for the swinging cradle festival of the god Chenna-Keśava of Velāpura.'—(*Ep. Carnat.*, Vol. V, Part 1, Belur Taluq, no. 14 ; Transl., p. 47, Roman text, p. 107.)

(93) ' While thus all the world was praising him as the founder of the greatness and increase of king Ballala and the cause of his prosperity—the daṇḍīśa Lakshma, together with his wife, mounted up on the splendid stone pillar (Śilā-stambha) covered with the poetical Vīra-śāsana, proclaiming his devotion to his master. And on the pillar they became united (?) with Lakshmī and with Garuḍa.'—(*Ep. Carnat.*, Vol. V, Part 1, Belur Taluq, no. 112 ; Transl., p. 74, last para.; Roman text, pp. 173, 174.)

(94) ' He erected temples, raised pillars for lights (Dīpa-māle), granted lands to Brāhmans till they were satisfied, constructed five forts and large

tanks.'—(*Ep. Carnat.*, Vol. v, Part 1, Ariskere Taluq, no. 109 ; Transl., p. 159, para. 1 ; Roman text, p. 365.)

(95) ' Dīpa-mālā-kambha ' and ' Basava-pillar.'—(*Ibid.*, Channarayapatna Taluq, nos. 155, 165 ; Transl., pp. 195, 198.)

(96) ' The unshaken pillar (Tolagada kambha).'—(*Ep. Carnat.*, Vol. vi, Tarikere Taluq, no. 12 ; Transl., p. 105.)

(97) ' Taking that to mind and desirous of performing a work of merit, the king Lakshma built of stone that abode of Jina, as if erected by Indra to endure in permanence, and afterwards set up a stone pillar (Śilā-stambha) at the great gateway of the temple, on which was inscribed a śāsana containing all his names and titles, to continue as long as sun, moon and stars.'—(*Ep. Carnat.*, Vol. vii, Shikarpur Taluq, no. 136; Transl., p. 103, para. 3, last sentence ; Roman text, p. 184, line 10, from bottom upwards.)

(98) ' Several persons (named) set up this vīra-stambha in his name.'—(*Ep. Carnat.*, Vol. xi, Challakere Taluq, no. 42 ; Transl., p. 102 ; Roman text, p. 176.)

(99) ' The mahā-maṇḍaleśvara Chāmuṇḍa-Rāyarasa (on the date specified) erected a Gaṇḍa-bheruṇḍa pillar (stambha) in front of the (temple of the) god Jagad-eka-malleśvara.'—(*Ibid.*, no. 151 ; Transl., p. 109, para. 2 ; Roman text, p. 193, last para.)

(100) ' The most striking object standing in the village is perhaps the Bheruṇḍeśvara pillar, now called the Garuḍa-kambha. It is a lofty and elegant monolith, with a figure of the Gaṇḍa Bheruṇḍa at the top. It was erected, according to the inscription on its base (quoted above, Shikarpur Taluq, no. 151) by Chāmuṇḍa-Rāya in 1047, and probably fixed the length of the Bheruṇḍa pole used in measuring length (refers to inscrip. no. 120 of the Shikarpur Taluq).

' Its dimensions are as follows : The shaft, to the top of the cornice of the capital, 30 feet 6 inches high the Bheruṇḍeśvara at top, about 4 feet high, the bottom of the pillar is 1 foot 6 inches square to 8 feet from the ground, above that it is circular, of the same diameter, with decorative bands. The Bheruṇḍda is a double-headed eagle with human body.'

(*Ep. Carnat.*, Vol. ii, Introduct., p. 47, note 1.)

(100*a*) The dimensions of the Tāḷagunda pillar, on which the inscrip. no. 176 of the Shikarpur Taluq is incised, are given by Mr. Rice : ' The pillar, which is of a very hard dark grey granite, is standing in front of the ruined Praṇaveśvara temple. Its pedestal is 5 feet 4 inches high and 1 foot 4 inches square at the top, a little more at the base. The shaft is octagonal, 6 feet 4 inches high, each face being 7 inches wide, but tapering slightly towards the top. The finial is a pear-shaped ornament, 1 foot 11 inches high.'—(*Ep. Carnat.*, Vol. vii, Introduct., p. 47, para. 2.)

(101) Mahā-rathisa Goti-putrasa Agni-mitraṇakasa siha-thabho dānam—'The gift of a lion-pillar (Siṁha-stambha) by the Mahā-rathi Agni-mitraṇaka, the son of Goti.'—(Karle inscrip. no. 2, *Arch. Surv.*, New Imp. Series, Vol. IV, p. 90.)

(102) 'On the east side, steps lead up to a platform on which stands a fine Kīrtti-stambha or Toraṇa arch. It consists of two highly carved pillars, 4 feet broad at the plinth, and rising to a height of 13 feet 10 inches including a broad cruciform capital, whose inner arms support the ornamental toraṇa or cusped arch, over this capital a prolongation of the shaft supports a sur-capital, 3 feet above the first, over which again lies the architrave in two fasciae richly carved. . . . This supports the projecting cornice with its decorative guttae, surmounted by a plinth and on this stands the pediment in which Śiva or Bhairava is the central figure.'

(Ahmadabad Architecture, Burgess, *Arch. Surv.*, New Imp. Series, Vol. XXXIII, p. 94, Plate LXXXII.)

(103) 'He set up Rāma in the Koṇḍarāma temple. Subsequently Janmejaya performed the serpent sacrifice here, a stone pillar, about 9 feet high, with the top fashioned like a trident or spear . . . being pointed out as the Yūpa-stambha or sacrificial post used by him.'—(*Mysore Arch. Report*, 1915–16, p. 21, Plate X, Fig. 1, on page 22.)

(104) *See* Buddhist cave temples (*Arch. Surv.*, New Imp. Series, Vol. IV, Plates XVIII, nos. 1–2; XXII, nos. 1–3; XXIX, no. 3).

See Sharqi Architecture of Jaunpur (*Arch. Surv.*, New Imp. Series, Vol. XI, Plates XXXIX, Figs. 1, 2, 3, 4; XL, Fig. 2; and read the inscrip. no. XXVII, p. 51, under ŚILPIN and STHAPATI).

Cf. Moghul Architecture of Fatehpur-Sikri (Smith, *Arch. Surv.*, New Imp. Series, Vol. XVIII, Part 1, Plates LIII to LXXI).

See Rām Rāz, *Essay on Arch. of Hind.*, Plates IV to XVIII.

See Lion-pillar (*Mysore Arch. Report*, 1915-16, Plate VII, Fig. 1, p. 14).

See Elephant pillars, Brahma-deva-pillar (*ibid.*, 1914–15, Plates IX, Fig. 3; XIII, Fig. 1, pp. 18, 26).

See pillars of Mukha-maṇṭapa with a stone umbrella in front.—(*Ibid.*, 1913–14, Plate V, Fig. 1, p. 14.)

(105) *See* Cunningham, *Arch. Surv. Reports*, Vol. I, Plate XXII (Bakhra and Lauriya Lion pillars), p. 58; XXIX (Kahaon and Bhitari pillars), p. 92; XLVI (capital of Aśoka Elephant pillar), p. 274.

Ibid., Vol. III, Plate XXXIV (Gaya granite pillars).

Ibid., Vol. IV, Plate V, the so-called Kutb-Minar, which is in reality a Hindu structure.

Cf. its details—'Total length of outer enclosure is 228 feet . . . The law of geometrical proportion is thus seen to govern the entire Hindu

Kutb structure ; from the size and the disposition of the inclosures which bound it down to the spacing of the ornamental bands that adorn its gates, every important feature is subject to the great law. But where is the law that governs the Muhammadan structures? They (the Muhammadans) designed like giants, and their Hindu workmen " finished like jewellers " ; but from the giant killed by jack, right through the whole genus, giants have hitherto been noted only for supreme stupidity, combined with immense strength. '—(Cunningham's *Arch. Surv. Reports*, Vol. IV, pp. 56–67.)

Ibid., Vol. V, Plates XXVII (Mallot temple pillar) ; XLV, XLVI (Indo-Persian pillars) ; XLVII to L (Indo-Corinthian pillars).

Ibid., Vol. VI, Plate XX (Viśāla-deva temple pillar).

Ibid., Vol. VII, Plates XVIII (Sati pillar from Simga ; the details of its mouldings) ; IX (section of interior of garbha-gṛiha shewing a pillar in elevation) ; X (elevation of a pillar of the Mahā-maṇḍapa).

Ibid., Vol. VIII, Plates XI, XII (brick pillar, Balrāmpur).

Ibid., Vol. IX, Plates XIV, XXIV, XXIX.

Ibid., Vol. X, Plates XIV (Besnagar Crocodile and Fan-palm pillars, p. 42) ; XXI (pillar of Swāmi-Gosura) ; XXII, Figs. 1, 2 (Sanchi pillars), 3 (Eran pillar), 4, 5 (Udayagiri pillars) ; XXVII (Eran pillar) ; XXVIII (Toran-pillar) ; XXX (Eran pillar of Narasinha temple).

Ibid., Vol. XIV, Pates XXIX, XXX (Sati pillars).

Ibid., Vol. XVI, Plates XXX, XXXI (Bhagalpur pillar).

Ibid., Vol. XIX, Plate X (Baijnath pillar).

Ibid., Vol. XX, p. 149, Plate XXXIV (Thieves pillars).

Ibid, Vol. XXII, Plate VII (Section of Aśoka pillar, Rampurwa).

Ibid., Vol. XXIII, Plate XXII (pillar of victory or Jaya-stambha).

(106) ' These pillars are common to all the styles of Indian architecture. With the Buddhists they were employed to bear inscriptions on their shafts, with emblems or animals on their capitals. With the Jains they were generally Deepadans (Dīpa-stambhas) or lamp-bearing pillars ; with the Vaishṇavas they as generally bore statues of Garuḍa or Hanūmān (Garuḍa-stambhas) ; with the Śaivas they were flagstaffs (Dhvaja-stambhas) ; but whatever their destination they were always the most original, and frequently the most elegant productions of Indian art.'—(Fergusson, *Hist. of Ind. and East. Arch.*, p. 50.)

' If any one wished to select one feature of Indian architecture which would illustrate its rise and progress, as well as its perfection and weakness, there are probably no objects more suited for this purpose than these stambhas or free-standing pillars. They are found of all ages, from the simple and monolithic lats which Aśoka set up to bear inscriptions or emblems, some 250 years B.C. down to the seventeenth or perhaps even eighteenth century of our era. During these 2,000 years they were erected first by the Buddhists

then by the Jains, and occasionally by the other sects in all parts of India ; and notwithstanding their inherent frailty, some fifty—it may be a hundred —are known to be still standing. After the first and most simple, erected by Aśoka, it may be safely asserted that no two are alike though all bear strongly the impress of the age in which they were erected, and all are thoroughly original and Indian in design.'—(Fergusson, *Hist. of Ind. and East. Ach.*, p. 277, para. 2.)

(107) The following references will give a glimpse of the pillars of the pre-Buddhistic periods (especially of the early Vedic period), when, it should be noticed, they were employed both as free-pillars (compare the yupas) and as forming the essential members of a building.

' The column or pillar in Indian architecture is indeed very ancient. The word Sthūṇa which is a synonym of pillar in the *Mānasāra* is used in the *Ṛig-Veda*[1] and the later literature[2] in the same sense. The word Stambha [3] is not perhaps so old but Skamba [4] is used in the *Ṛig-Veda* in the same sense.'—(Macdonall and Keith, *Vedic Index*, II, pp. 488, 483.)

The word ' upa-mit,' not used in the *Mānasāra*, occurs in the *Ṛig-Veda*[5] and the *Atharva-Veda*[6] in the sense of pillar.

According to Professors Macdonall and Keith, in the *Ṛig-Veda* the word 'Upa-mit' is used in the sense of an upright pillar. In the *Atharva-Veda*, the word, coupled with Parimit and Pratimit, denotes the beams supporting the Upamit. Parimit denotes the beams connecting the Upamit horizontally.[7]

' Concerning the proportions of columns, the second sort of column in the Hindu architecture (as depicted in the *Mānasāra*) may be compared with the Tuscan, the third with the Doric, the fourth with the Ionic, and the fifth with the Corinthian or composite pillar.' (Rām Rāz, *ibid.*, p. 38.)

The following details of the Indian and Greco-Roman orders may be compared here for a clear knowledge of the subject.

Rām Rāz describes the Indian Orders on the authority of the *Kāśyapa* and the *Mānasāra* and ' partly from the models found in the temples and porticoes of a pure Hindu style.' And the details of the five Greco-Roman orders are quoted below from Vitruvius, Palladio and others as given by Gwilt.

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[1] *R.-V.* I, 59, 1; V. 45, 2 ; 62, 7 ; VIII, 17, 14 ; X, 18, 13 (of the grave).
[2] *A.-V.* III, 12, 6 (of the vaṁśa, beam, being placed on the pillar) ; XIV. 1, 63 *Śata-patha-Brāhmaṇa*, XIV, 1, 3, 7 ; 3, 1, 22, etc.
Sthūṇa-rāja—main pillar, III, 1, 1, 11 ; 5, 1, 1.
[3] *Kāṭhaka-Saṁhitā*, XXXI, 1 ; and often Sūtras.
[4] *R.-V.* I. 34 2 ; IV, 13, 5, etc.
[5] *R.-V.* I. 59 1 ; IV. 5, 1.
[6] *A.-V.* IX. 3. 1.
Cf. Zimmer, *Altindishches Leben*, 153.
[7] *Vedic Index*. I, p. 93.

'The second sort of column is seven diameters in height; it is placed in most examples upon a base and pedestal; the base is two diameters high; it belongs to the species called Kumbha-bandha. The pedestal is equal in height to three-fourths of the base and is of the kind called Vedi-bhadra. The column is also placed . . . only on a pedestal which is equal to half the height of the pillar, and which is one of the sorts called Mañcha-bhadra. The capital given to the first design of this pillar is taken from a model found at Tiruvottiyur, near Madras; it is the same which *Mānasāra* and others call Taraṅga-Bodhika (?), and is one diameter high and projects equal to its height. Speaking of this sort of capital, *Mānasāra* says "it should be decorated with Taraṅgas (projecting moulding employed in capitals, terminating by a number of undulating lines) and other appropriate ornaments; the height of the capital being divided into twelve parts, let the form of Taraṅgas occupy three of them, let the Bodhika (capital), which should resemble the cobra de capello, occupy six, and adorned with flowers and the like, and let one part above this be given to . . . one to the cyma, and one to the listel. The projecting part of the Bodhika should be fashioned like the stalk of a plantain flower. At the upper extremity are the Taraṅgas of equal height or something more. The lower part of the head of the Bodhika is one-third on the upper in breadth, and a third of the former being divided into five parts, one of them is given to the cavetto, one to the fillet, two to the cyma and one to the listel; and the whole should be decorated with foliages, rows of gems, and the like." In another place the same author says " let the capital (Bodhika) be made to consist of one, two, three, four, five, six faces, according to the situation in which it is placed ".'

'The other form of capital given to the column is taken from a maṇḍapa at Mayalapur. It is to be met with in many other ancient buildings and is what the artists call in Tamil surub-bodhika, roll capital. I cannot find any particular description of it, except a passage in the *Mānasāra*, which says: " The projecting ornaments on the sides of the capital are made either in the form of an inverted apex or of a wheel (chakra) or circle. It is one diameter in height and projects but three-quarters of the diameter ".'—(Rām Rāz, pp. 31–32.)

This is compared with the Tuscan order, the details whereof are given below from Vitruvius and Vignola as quoted by Gwilt.

I. Tuscan order:

'Vitruvius (Book IV, Chap. VII) in this order forms the columns six diameter high, and makes their diminution one-quarter of the diameter. He gives to the base and capital each one module in height. No pedestal is given by him. Over the capital he places the architrave of timber in two thicknesses connected together by dovetailed dowels. He, however,

leaves the height unsettled, merely saying that their height should be such as may be suitable to the grandeur of the work where they are used. He directs no frieze, but places over the architrave cantilevers or mutuli projecting one-fourth of the height of the column, including the base and capital. He fixes no measure for the cornice, neither does he give any directions respecting the inter-columniations of this order. The instructions are not so specific as those which he lays down for other orders, and there have been various interpretations of the text, which unfortunately cannot in any of the suppositions be tested on ancient remains.' (Gwilt., *Encycl.*, art. 2556.)

In the following table of the parts of the Tuscan order (Gwilt., *Encycl.*, art. 2555) the whole height according to the measuring unit of Vignola is 16 modules and 3 parts :

Mouldings whereof the parts are composed

				Heights of mouldings in parts of a module	Projections from the axis of column in parts of a module
			ENTABLATURE		
A. Cornice, 16 parts.	Cymatium and parts.		Quarter round ..	4	27½
			Astragal ..	1	
			Fillet ..	½	23½
	..		Congé, or cavetto	1	22½
			Corona ..	5	22½
			Drip ..	1	21½
			Sinking from corona, or hollow ..	½	19½
			Fillet ..	½	14
			Bed moulding ogee	4	13½
B. Frieze, 14 parts.	..	..	.. ..	14	9½
C. Architrave, 12 parts.	Fillet ..		Fillet, or listel ..	2	11½
	Fascia ..		Congé or small cavetto ..	2	9½
			Fascia ..	8	9½

The height of the drip under the corona is taken on that member, and that of the hollow in the height of the fillet.

			COLUMN		
D. Capital, 12 parts.	Abacus ..		Fillet ..	1	14½
			Congé, or cavetto	1	13½
			Band ..	2	13½

			Heights of mouldings in parts of a module	Projections from the axis of column in parts of a module
		COLUMN		
D. Capital, 12 parts—(*concld.*).	Cymatium	Ovolo ..	3	13¼
		Fillet ..	1	10½
		Congé, or cavetto	1	9¼
	Neck or	Hypotrachelin ..	3	9½
Shaft. 12 modules.	Astragal, or necking	Bead ..	1	11
		Fillet ..	½	10½
		Congé, or cavetto	1	9½
	Shaft ..	Shaft ..	11 mod. 8 parts	9½
		Congé, or apophyge. ..	1½	12
E. Base, 12 parts.	..	Fillet ..	1	13½
		Torus ..	5	16½
		Plinth pedestal ..	6	16½
G. Cornice, 6 parts.	Cymatium	Listel ..	2	20½
		Ogee ..	4	20
F. Die, 44 parts.	..	Die, or dado ..	3 mod. 4 parts	16½
		Congé, or apophyge ..	2	16½
Base, 6 parts.	..	Fillet ..	1	18½
		Plinth ..	5	20½

The third sort of column, with its base and capital, is eight diameters high, with a diminution of the shaft at the top of the eighth part of the thickness at its bottom. The base occupies half a diameter and this height is to be divided into ten parts. Two to be given to the plinth, one to the fillet, three to the cymatia and its fillet, one and a half to the cavetto, the same to the torus, and one to the cymbia. The whole projection of the base is half of its height. The following passage from the *Mānasāra* refers to this kind of base: ' let a base ornamented with the lotus be made under the foot to the pillars one or two diameters in height, and let it be adorned with figures of demons, lions, and the like.'

' The height of the capital, which is made after the manner of the Phalaka, is three-quarters of the lower diameter of the column, and is divided into thirteen parts ; two are given to the abacus, one to the fillet, two to the maṇḍana, seven to the cymarecta, and one to the cymbia. The upper part of the shaft, about one and a half diameters below the capital, being

divided into twenty-four parts, three are given to the collarino with its fillet, three to the ovolo, three to the lower collarino, five to the lower torus with its cymatia, and ten below to the strings of pearls (muktādāma). The projection of the capital is one diameter, or about an eighth part beyond that of the lowest part of the base, the fillet projects the full, and the torus three-quarters of their respective heights.'

'The height of the entablature is one-fourth of that of the column. It is to be divided into twenty-one parts : eight are given to the architrave, seven to the cornice, and six to the vyālam (frieze). Of the eight parts of the architrave, one is to be given to the cavetto, three to the tema or benda (uttara) with its listels, two to the cymarecta and to the upper fascia (vājana). Of the seven parts of cornice, one occupies the fillet, and the remainder the ovolo (prastara) ; and of the six parts of the cornice (or frieze, vyāla) three to be given to the cavetto (or fillet, vyājana), two to the prati-vājana (cavetto), and one to the fillet. The projection of the vājana (fillet) of the architrave is equal to that of the capital, that of the prastara (ovolo) is twice as much, and that of the cornice equal to its own height. After making a similar division of the entablature, our author (*Mānasāru*) lays down the following rule respecting the projection of the members. The height of the architrave being divided into four, five, six, seven or eight parts, one should be given to its projection beyond the pillars. The kapota (corona) projects equal to its height, or to three-fourths of it, and the vājana (fillet) one-fourth. The āliṅga (fillet) recedes about one diameter, and the antarita (fillet) projects equal to its own height, and the same may be said of the prati.'—(Rām Rāz, *Ess. Arch. Hind.*, pp. 32, 33.)

This third sort of Rām Rāz's column is apparently without a pedestal, Its base too does not exactly correspond with any of the bases mentioned in the *Mānāsāra* (Chap. xiv). None of the *Mānāsara's* eight entablatures consists of twenty-one parts like the one prescribed above for the column under description.

Rām Rāz (p. 38) identifies this column with the doric order, the details whereof are given below from the texts of both Virtuvius, and Vignola, as quoted by Gwilt.

II. Doric order :

Vitruvius (Book iv, Chap. iii) describes the Doric order more clearly than others. 'In order to set out its proportions, he tells us, though not giving a direct rule, that its pedestal is composed of three parts, the cymatium or cornice, the die and the base : and that the base and the cymatium are composed of many mouldings, whose individual proportions, however, he does not give. He assigns no particular base to the Doric order : but nevertheless, places under half a diameter in height the Attic base, whose

members are the plinth, small fillet, scotia, and the upper torus with its superior and inferior fillets, together with the apophyge of the column. He gives to the projection of the base a fifth part of the diameter of the column. The height of the shaft he makes of six diameters, and its diminution a sixth part of the diameter. The capital's height he makes equal to half a diameter, and divides it into three parts, one for the abacus and its cymatium, another for the echinus and its fillet, the third for the hypotrachelium. To the architrave he assigns the height of one half diameter of the column and to the frieze fifty parts of the module (semidiameter divided into thirty parts), including the fascia, forming the capital of the triglyphs. His cornice consists of thirty parts of the module and its projection forty. The whole height which he gives to the order is (in the measurement here adopted) seventeen modules and twenty parts.'—(Gwilt, *Encycl.*, art. 2566.)

In the following table all the details of the Doric order are given (Gwilt, *Encycl.*, art. 2566).

Members composing the orders

		Heights of mouldings in parts of a module	Projections from the axis of column in parts of a module
	ENTABLATURE		
A. Cornice, 18 parts.	Fillet of corona	1	34
	Cavetto	3	31
	Fillet	½	26
	Cyma reversa	1½	30
	Corona	4	28½
	Drip	½	27½
	Fillet	½	25
	Gutta under the corona ..	½	24½
	Dentil	3	15
	Fillet	½	13
	Cyma reversa	2	12½
	Capital of triglyph	2	11
B. Frieze, 18 parts.	Triglyph	18	10½
	Metope	18	10
C. Architrave, 10 parts.	Listel	2	11½
	Capital of guttae	½	11
	Guttae	1½	11
	Fascia	10	10

		Heights of mouldings in parts of a module	Projections from the axis of column in parts of a module
	Column		
D. Capital, 12 parts.	Listel	½	15½
	Cyma reversa	1	15¼
	Band	2½	14
	Echinus or quarter round ..	2½	13¾
	Three annulets	1½	11½
	Neck of capital	4	10
	Astragal .. Ovolo ..	1	12
	Astragal .. Fillet ..	½	11½
	Astragal .. Congé ..	1½	10
	Shaft of the column, 14 modules.		
E. Base, 12 parts.	Apophyge or congé	2	12
	Fillet	⅔	14
	Astragal	1⅓	14¾
	Torus	4	17
	Plinth	6	17
	Pedestal		
F. Cornice, 6 parts.	Listel	½	23
	Echinus	1	22¾
	Fillet	½	21¾
	Corona	2½	21
	Cyma reversa	1½	18½
	Die of the pedestal, 4 modules.		
G. Base, 10 parts.	Congé	1	17
	Fillet	½	18
	Astragal	1	18¾
	Inverted cyma	2	19
	Second plinth	2½	21
	First plinth	4	21½

'The fourth sort of column is nine diameters high. The base is one of those called Prati-bhadra (*see* under ADHISHṬHĀNA), and is one diameter in height. It is without a pedestal.

'The base is to be divided into eighteen equal parts, two to be given to the plinth, one to its fillet, three to the cyma recta, three to the cavetto with its listel, three to the torus, three to the upper cavetto, two to the plat-band (pāda-bandha), and one to the cimbra (? cymbia). The

projection of the plinth is one-third of the height of the whole base, the torus and the plat-band project equal to their respective heights.'

'The upper ornaments (? entablature) of this column occupy two diameters, and the capital takes three-quarters of the diameter, which is to be divided into ten parts : two to be given to the abacus, which projects half a diameter, one to the strings of pearls, one to the fillet, four to the cymatia, and one to the circular cymbia. The ornaments under the capital are to be divided into sixteen parts : of which give two to the cavetto or collarino, one and a half to the cyma, four to the torus, which projects perpendicular to the plinth or three-quarters part of its height, one and a half to the lower cyma, three to the lower collarino, two to the astragal, which projects equal to its own height, and two to the third cyma and its fillet, below which a space equal to three diameters is taken up by strings of pearls, but which are omitted in some columns of a similar description.'—(Rām Rāz, p. 34.)

The sources of the details given above are not specified. The account of the entablature, capital and shaft is also not quite clear.

Rām Rāz (p. 38) identifies this column with the Ionic order, the details whereof are given below for comparison, from Vitruvius and Gwilt :

III. Ionic order :

Vitruvius's description of this order (Book III, Chap. III) is not clear. According to his commentator Daniel Barbaro (Gwilt, *Encycl.*, art. 2577) 'the height of the pedestal is made nearly a third part (including its base and cymatium) of the height of the column. To the base of the column he assigns half a diameter, and to the shaft itself nearly eight diameters, its surface being cut into twenty-four flutes separated by fillets from each other. His method of describing the volute is not thoroughly understood : it is, perhaps, of little importance to trouble ourselves to decipher his directions, seeing that the mode of forming it is derived from mathematical principles, as well understood now as in the days of the author.'

'The architrave he leaves without any fixed dimensions, merely saying that it must be larger or smaller according to the height of the columns. He prescribes, however, that the architrave, frieze, and cornice should together be somewhat less than a sixth part of the height of the column, with its base and capital. The total height he makes for the order, according to our measures, is twenty-five modules and nearly nine parts.'

'Of the Ionic order there are many extant examples, both Grecian and Roman, and except the debased later examples of the latter there is not that wide difference between them that exists between the Grecian and Roman Doric.'

Gwilt (*Encycl.*, art. 2574) gives in the following table the heights and projections of the parts of the order :

Members composing the orders

		Heights of mouldings in parts of a module	Projections from the axis of column in parts of a module
	ENTABLATURE		
A. Cornice, 34 parts.	Fillet of cyma	1½	46
	Cyma recta	5	..
	Fillet	½	41
	Cyma reversa	2	40½
	Corona	6	38½
	Fillet of the drip	1	29¼
	Ovolo	4	28¼
	Astragal	1	25
	Fillet	½	24½
	Dentel fillet	1½	21
	Dentals	6	24
	Fillet	1	20
	Cyma reversa	4	19½
B. ..	Freize	27	15
C. Architrave, 22½ parts.	Listel	1½	20
	Cyma reversa	3	19⅔
	First fascia	7½	17
	Second fascia	6	16
	Third fascia	4½	15
D. ..	Capital on the side	19	20
	Capital on the coussinet, or cushion	16	17½
	COLUMN		
E. Captal, 17 parts.	Fillet	1	20
	Cyma reversa	2	19½
	Listel	1	17½
	Channel of the volute ..	3	17
	Ovolo	5	22
	Astragal .. Bead	2	18
	Fillet	1	17
	Congé, or cavetto ..	2	15
	Shaft of the column. Above	..	15
	16 mod. 6 parts.		
	Below	..	18

		Heights of mouldings in parts of a module	Projections from axis of column in parts of a module
	Column		
F. Base, 19½ parts.	Apophyge	2	18
	Fillet	1½	20
	Torus	5	22½
	Fillet	¼	20½
	Scotia	2	20
	Fillet	¼	22
	Two beads	2	22½
	Fillet	¼	22
	Scotia	2	21
	Fillet	¼	24
	Plinth	6	25
	Pedestal		
G. Cornice, 11¾ parts.	Fillet	⅔	35
	Cyma reversa	1⅓	34¾
	Corona	3	33½
	Fillet of the drip	½	30
	Ovolo	3	29½
	Bead	1	27
	Fillet	1	26¼
	Congé	¼	25
	Die, 4 modules	12¾	1 mod.7
H. Base, 10 parts.	Congé	2	25
	Fillet	1	27
	Bead	1⅓	28
	Cyma reversa	3	27½
	Fillet	⅔	31⅔
	Plinth	4	33

'The fifth sort of column is ten diameters high, including the base which ought to be three-quarters of the diameter. It should be divided into twelve parts: two for the plinth whose projection is a fourth part of the diameter, one for the fillet, four for the cyma, and one and a half for the cavetto, one for the lesser cyma, one and a half for the torus, and one for the cymbia. The projection of the cyma and torus is equal to their respective heights. This column is sometimes erected on a high pedestal, which is about a third part of the height of the column.'

'The height of the capital, which is called Pushpa-bandha, is equal to the upper diameter of the column: its projection on the side is equal

to its height, and the middlemost square is ornamented with the petals of a lotus. " The altitude of the capital," says Kaśyapa, " may be equal to the higher, lower, or the middle diameter of the column. Its breadth may be equal to its height, or four or five diameters." A capital, the height of which is from one to two diameters, and the breadth twice its height, is of the superior sort ; and that which in height is half the diameter, and in breadth from one to three diameters, is of the inferior sort.'

' In colonnades of porticoes, the inter-columniations are found to be from one diameter and a half to two diameters.'—(Rām Rāz, pp. 34–35.)

In this order the description of the entablature is not given. Rām Rāz (p. 38) identifies this ' with the Corinthian or Composite pillar,' the details of both of which are given below for comparison from Vitruvius and Palladio as quoted by Gwilt.

IV. Corinthian order :

' Vitruvius (Book IV, Chap. I) is scanty in the information he gives on the Corinthian order, and what he says respecting it relates more to the origin of the capital and the like than to the proportion of the detail. He makes the capital only one diameter high, and then forms upon the plan a diagonal two diameters long by means whereof the four faces are equal according to the length of the arc, whose curve will be the ninth part in length and its height the seventh part of the capital. He forms the order with a pedestal, with base and cornice (as Daniel Barbaro would have it). The whole height given to it in our measures is about 27 modules and 2 parts.'—(Gwilt., *Encycl.*, art. 2587.)

In the following table Gwilt (*Encycl.*, art. 2583) gives, on the authority of Vignola, measurements of the mouldings of the Corinthian order :

Members composing the order

		Heights of mouldings in parts of a module	Projections from axis of column in parts of a module
	ENTABLATURE		
A. Cornice, 38 parts.	Fillet of cornice	1	53
	Cyma recta	5	53
	Fillet	½	48
	Cyma reversa	1½	45½
	Corona	5	46
	Cyma reversa	1½	45½
	Modillion	6	44½
	Fillet (remainder of modillion band)	½	28½
	Ovolo	4	28

		Heights of mouldings in parts of a module	Projections from axis of column in parts of a module
	Entablature		
A. Cornice, 38 parts.	Bead	1	25
	Fillet	½	24½
	Dentils	6	24
	Fillet	½	20
	Hollow or congé	3	19⅔
B. ..	Frieze, 1 mod. 7½ parts high ..	..	15
C. Architrave, 27 parts.	Fillet	1	20
	Cyma reversa	4	19⅔
	Bead	1	17
	First fascia	7	16½
	Cyma reversa	2	16⅓
	Second fascia	6	15½
	Bead	1	15½
	Third fascia	5	15
	Column		
D. Capital, 42 parts (Fig. 890).	Echinus	2	diagonally 36, on plane 33½
	Fillet	1	
	Lower member of abacus ..	3	
	Inverted echinus of the bell ..	2	22⅔
	Large volutes	6	31½
	Upper small leaves ..	4	
	Large leaves	12	at top, 24½
	Lower leaves	12	at top, 20½
Shaft, 17 modules 1½ parts.	Astragal	2	18
	Fillet	1	17
	Congé	2¼	
	Shaft .. upper part ..	..	15
	Shaft .. lower part ..	..	18
	Apophyge	2	20
	Fillet	1½	21⅝

		Heights of mouldings in parts of a module	Projections from axis of column in parts of a module
	Column		
E. Base, 14½ parts.	Torus	3	22
	Fillet	¼	20½
	Scotia	1½	20
	Fillet	¼	20⅜
	Two beads	1	22
	Fillet	¼	21⅝
	Scotia	1½	21⅛
	Fillet	¼	23
	Torus	4	25
	Plinth	6	25
	Pedestal		
F. Cornice, 14¼ parts.	Fillet	⅔	33⅓
	Cyma reversa	1⅓	33¼
	Corona	3	32
	Throat	1¼	30¾
	Bead	1	26½
	Fillet	¾	25¾
	Frieze	5	25
	Bead	1¼	26⅞
Die, 91½ parts.	Fillet	¾	26¼
	Congé	1½	25
	Die	87¼	25
	Fillet	1½	25
	Congé	¾	26¼
G. Base, 14¼ parts.	Bead	1¼	27¼
	Inverted cyma reversa ..	3	26⅝
	Fillet	1	30¾
	Torus	3	32½
	Plinth	6	32½

V. Composite order (compound of Corinthian and Ionic) :

Vitruvius has not given any instructions on this order. Gwilt (*Encycl.*, art. 2596) gives Palladio's details of this order. 'To the pedestal's height this master assigns 3 diameters and three-eighths of the column adding to it a lower plinth of the height of half a diameter. He makes the base of the column half a diameter in height and assigns to the shaft eight diameters and a little more than one-fourth, and cuts it into twenty-four flutes. The height of this capital is one diameter and a sixth . . . The architrave, frieze and cornice he makes a little less than a fifth part of the height of the column. The whole height of his profile in our measures is thirteen modules and twelve parts.'

In the following table Gwilt (*Encycl.*, art. 2592) gives, on the authority of Vignola, measurements of the mouldings of the Composite order :

Members composing the order :		Heights of mouldings in parts of a module	Projections from axis of column in parts of a module
	ENTABLATURE		
A. Cornice, 36 parts.	Fillet of cornice	1½	51
	Cyma recta	5	51
	Fillet	1	46
	Cyma reversa	2	45½
	Bead	1	43¾
	Corona	5	43
	Cyma under the corona ..	1½	41
	Fillet	1	33
	Cyma reversa	4	32⅓
	Fillet of the dentils	½	28
	Dentils	7½	29
	Fillet	1	23
	Ovolo	5	22
B. Frieze, 27 parts.	Bead	1	17
	Fillet	½	16¼
	Congé	¾	15
	Upright face	17¼	15
	Apophyge	7	22
C. Architrave, 27 parts.	Fillet	1	22
	Cavetto	2	20½
	Ovolo	3	20
	Bead	1	17¾
	First fascia	10	17
	Cyma reversa	2	16⅔
	Second fascia	1	15
	COLUMN		
D. Capital, 48 parts.	Echinus and fillet	2	20⅓
	Lower member of abacus ..	4 diagonally	32½
	Volute	12 diagonally	30⅔
	Band of upper leaves	3	24
	Upper leaves	9	22½
	Band of lower leaves	3	20⅔
	Lower leaves	9	19⅓

		Heights of mouldings in parts of a module	Projections from axis of column in parts of a module
	Column		
Column, 16 mod. 12 parts.	Astragal	2	$17\frac{1}{2}$
	Fillet	1	$16\frac{1}{2}$
	Congé	2	$15\frac{1}{2}$
	Shaft .. above		15
	Shaft .. 16 mod. 12 parts.		
	Shaft .. below		18
	Apophyge	2	20
	Fillet	$1\frac{1}{2}$	20
E. Base of column, 18 parts.	Congé	2	20
	Fillet	$1\frac{1}{2}$	20
	Torus	3	22
	Fillet	$\frac{1}{4}$	$20\frac{1}{2}$
	Scotia	$1\frac{1}{2}$	20
	Fillet	$\frac{1}{4}$	$21\frac{1}{3}$
	Bead	$\frac{1}{2}$	$21\frac{3}{4}$
	Fillet	$\frac{1}{4}$	$21\frac{1}{3}$
	Scotia	2	$20\frac{2}{3}$
	Fillet	$\frac{1}{4}$	23
	Torus	4	25
	Plinth	6	25
	Pedestal		
F. Cornice, 14 parts.	Fillet	$\frac{2}{3}$	33
	Cyma reversa	$1\frac{1}{3}$	$32\frac{3}{4}$
	Corona	3	$31\frac{1}{2}$
	Cyma recta	$1\frac{1}{3}$	$28\frac{1}{2}$
	Fillet	$\frac{1}{2}$	$26\frac{1}{4}$
	Cavetto	1	$25\frac{1}{4}$
	Frieze	5	25
	Bead	1	27
Die, 94 parts	Fillet	1	$27\frac{1}{4}$
	Congé	$1\frac{1}{4}$	25
	Die	$88\frac{3}{4}$	25
	Apophyge	2	27
	Fillet	1	27
G. Base, 12 parts.	Bead	1	$27\frac{3}{4}$
	Inverted cyma reversa ..	3	$30\frac{1}{4}$
	Fillet	1	$31\frac{1}{4}$
	Torus	3	33
	Plinth	4	33

'The orders and their several characters and qualities do not merely appear in the five species of columns into which they have been sub-divided, but are distributed throughout the edifices to which they are applied, the column itself being the regulator of the whole composition. It is on this account that the name of orders has been applied to the differently formed and ornamented supports, as columns, which have received the names of Doric, Ionic, Corinthian, Tuscan, and Composite orders, whereof the three first are of Grecian origin, and the two last, it is supposed, of Italian or Roman origin. Each of these, by the nature of its proportions and the character resulting from them, produces a leading quality, to which its dimensions, form and ornaments correspond. But neither of the order is so limited as to be confined within the expression of any single quality. Thus the strength indicated in the Doric order is capable of being modified into many shades and degrees of that quality.'—(Gwilt., *Encyl.*, art. 2538.)

(Further accounts of the origin of orders will be found under NĀGARA.)

'There are other columns,' says Rām Rāz (p. 38), 'in the Indian architecture, not only one diameter lower than the Tuscan, but from one to two diameters higher than the Composite.' 'The first sort is a column six diameters high; it is rarely made but upon a high base and pedestal. The entablature is more than half the altitude of the column, and the inter-columniation generally four diameters. The pedestal is of the Prati-bandha kind (*see* under UPAPĪṬHA, and there it is called Prati-bhadra) : and its height is equal to that of the base which is one-third of that of the column itself, or two diameters. The base is called Mañcha-bandha (*see* under ADHISHṬHĀNA) and is divisible into thirty parts. The capital is equal in height to upper diameter of the shaft, and its projection is equal to its height. The form of the capital is called Pushpa-bandha.' 'The height of the capital,' says *Mānasāra*, 'may be either equal to the breadth of the shaft, or one-half or three-quarters of it, according as it may appear proportionate to the size of the column. Let the breadth of it be either one, one and a quarter, half, or three-quarters of the diameter.' The entablature placed on this column does not differ from that placed on other pillars, except perhaps in the height. On this subject *Mānasāra* observes generally : 'The whole height of the entablature may be either three-quarters, one, one and a quarter, one and a half, one and three-quarters, or twice that of the base. The height of the entablature may be a half, one-fourth, or three-quarters of that of the shaft, or the height of the pillar, being divided into eight parts, six, five, three or two may be given to that of the entablature. The height of the entablature is measured from the architrave up to the corona.'—(Rām Rāz, p. 30.)

'The sixth sort of pillar is eleven diameters high. The design made to illustrate this is selected from among the pillars found at Conjéveram : it

represents a square pillar of the same height, exclusive of the base, which is composed of a plinth, a cyma recta and torus, with their fillets, and is one diameter high. The same pillar, including the base, may be taken as an example also of the seventh sort, which ought to be twelve diameters in height.'

('When the pillar,' says Kaśyapa, 'is measured in height from the upper fillet of the base, it is called Nigata-stambha, but when it is measured from the plinth below it, is termed Nichata-stambha.')

'At the foot of the shaft a space equal in height to the hypotenuse of the lower diameter is made quadrangular, around which are sculptured images of the deities, and the like, in bas-relief. In about half a diameter above this, is made the ornament called Nāga-bandha (a serpent-shape moulding). The remainder of the shaft, about three diameters and a half, is made to consist of eight sides, including the strings of pearls, which occupy three-quarters of a diameter, and appear to be suspended from the fillet of the upper ornament called Padma-bandha (a lotus-shape moulding), which takes up half a diameter. Next above this is the kalaśa or water-pot, above three-quarters of a diameter, and above this are made, with the same height given to them, three other mouldings, Hārikā, Āsya, and Tāṭikā, which last projects a fourth part of the diameter. Above this again is the lower collarino, in height about a quarter of a diameter, then the ornament called Kumbha (pitcher) which is half a diameter high and projects as much; next the upper collarino, a little less than the lower one; next the moulding called Phalakā (abacus) which is one diameter high and projects equal to its height; next the third collarino, about three-fourths of a diameter; and last of all the capital of the kind called Pushpa-bandha.'—(Rām Rāz, pp. 35-36.)

'This pillar may, according to the definition of its form, be called Vishṇu-kānta and appears in most of the ornaments, though not in their proportions, to agree with the description given in the *Mānasāra* of that which he calls Pālikā-stambha. He says 'the height of the collarino should be one diameter of the column; that of the Phalakā (abacus) one, three-quarters, or, two or three diameters, and its projection one-fourth of its height. The height of the Kumbha (pitcher) below the collarino may be half, one and a half, or two diameters and its breadth equal to the upper or lower collarino. The height of the Tāṭikāsya is half or three-quarters of the diameters. Let the lower cyma be equal to its height and let its breadth be one and a quarter diameter. Below that comes the Hārikā of half that height. The height and breadth of the Tāṭikā are equally one diameter. Below that let a Kalaśa (pitcher) be made about two diameters in breadth and let the upper part of it be shaped in the form of a *durdhura-*

flower, and in such a manner as may appear graceful. Below this, about three-quarters of the diameters should be decorated with strings of pearls.'

Concerning the dimensions of his seventh sort of column, Rām Rāz gives accounts of a few more specimens which are quoted below :

'The pillars at Tiruvannamalai are estimated to be about 30 feet high, with proportionate thickness, diminished at the top by a twelfth part of the lower diameter. There are three kinds of them. The first is placed on a high pedestal and base ; the whole shaft is divided into ten compartments, each being equal in height to the hypotenuse of the diameter of the pillar ; and on all the four sides of these compartments are sculptured, in relief, four small pillars or pilasters supporting an entablature. The second pillar differs from the first in having two, instead of four, small ornamental pilasters in relief, on each side of the ten compartments, into which the shaft is divided, with an ornamented niche in the middle, which in the third specimen is flanked by two small pañjaras or ornamented cages on both sides of it. The second sort of pillar is placed on a base without a pedestal, and the third on a pedestal without a base.'—(Rām Rāz, p. 37.)

'The difference in the Indian orders, consists chiefly in the proportion between the thickness and the height of pillars, while that of the Grecian and the Roman orders, not only on the dimensions of columns, but also on the form of the other parts belonging to them.'

'The Egyptian columns appear to have no fixed proportion in regard to thickness and height. In some of the specimen of the ruins of upper Egypt, the height of the columns consists of from four to six times the lower diameter, which last proportion coincides with that of the first sort of the Indian pillar.'

'The orders of India, and of Greece and Rome, are remarkable for beautiful effect of their proportions, a circumstance to which little regard has been paid by the Egyptians. Both the Indian and Grecian columns are diminished gradually in their diameter from the base to the summit of the shaft, a practice which has never been observed in the Egyptian ; on the contrary, a diametrically opposite rule has been observed in their shafts, which are made narrower at the bottom than at the top, and placed upon a square or round plinth. The proportion in which the diminution at the top of the columns of the two former is made, seems to have been regulated by the same principle, though not by the same rule. The general rule adopted by the Hindu architects in this respect is that the thickness at the bottom, being divided into as many parts as there are diameters in the whole height of the column, one of these parts is invariably diminished at the top ; but in the Grecian and Roman architecture, the diameter of the upper part of the shaft, in a column of 15 feet in height,

is made one-sixth less than its thickness at the base; and in a column of 50 feet, the diminution is one-eighth. The higher the columns are, the less they diminish, because the apparent diminution of the diameter in columns of the same proportion, is always greater according to their height, and this principle supposed to have been discovered with greater scientific skill, and is adduced as one of the proofs of the highly refined taste of the Greeks; but we observe that precepts derived from the same principle have been taught and practised in India from time immemorial.'

'The plan of the Grecian columns is always round; but the plan of the Hindu columns admits of every shape, and is frequently found in the quadrangular and octangular form, and richly adorned with sculptured ornaments. The form of the Egyptian pillars too, is circular, and their shafts are often fluted like the Corinthian, but the fluting of the Indian columns resembles neither the one nor the other. The decorations of the Egyptian columns often consist in representations "of the bundle of reeds" tied up with a cord on the top, having a square stone placed over it; in some specimens are also found bindings or fillets in various parts of the shaft, and in the interval between them, reeds and hieroglyphics are represented. But there is nothing like these ornaments in the Indian orders, except in the columns found in the excavated temple of Elephanta, and some other places, and which differ materially from those employed in other situations in Hindustan.'

'There are no fixed, as we saw before, inter-columniations in the Hindu architecture, as are found in the Grecian, but the spaces allowed between pillar and pillar in different Hindu buildings, are found nearly to coincide with the Grecian mode of inter-columniations, though in too many instances, they differ widely from it, and the same may perhaps be said of the Egyptian colonnades.'

'The capital of the Grecian columns invariably marks the distinction of the several orders; those of the Indian are varied at pleasure, though not without regard to the diameter and length of the shaft; and the forms of the plainest of them, though they have in reality nothing in common with the Grecian order, are found at a distant view, to bear some resemblance to the Doric and Ionic capitals; but those of a more elaborate kind are sometimes so overloaded with a sort of filligree ornaments, as to destroy the effect of the beautiful proportions of the whole. The Egyptian capitals, on the other hand, are formed into elegant vase shapes, decorated with the stalks, leaves, and blossoms of the lotus, and occasionally with palm leaves, which latter ornaments are supposed to have given the first idea of the Corinthian capitals. And in some specimens, the Egyptian capital is composed of the representation of the head of the goddess Isis.'

In view of the classification and number (5) of the orders, their principal composing mouldings (8), and other details of similarity pointed out above, the 'affinity,' says Rām Rāz truly (p. 38), 'between the columns of India and of Rome and Greece is so striking, that one would be apt to ascribe it to something more than mere chance.'[1]

STŪPA—Name of edifices, which serve as receptacle for a relic or as monument. They are hemispherical or bell-shaped, and rest upon a base of three concentric storeys which form ambulatories round the tope; they sustain a cubical erection, the so-called *tee* from which rises the spire (chhatra) which crowns the whole. The relic-chamber (dhātugarbha, whence the name 'Dagoba,' used in Ceylon for the whole edifice) is in the interior below the *tee*. Sometimes a sort of roof or temple was built over the tope (*Mahāvaṁśa*, 31, 29). Chaitya (sanctuary) is often used as a synonym (W. Geiger, *Mahāvaṁśa*, p. 295). A heap, a mound, a funeral pile, a tope, a Buddhist monument, known as chaitya in Nepal and as dagoba in Ceylon.

(1) 'The Buddhist dome-shaped tower built over relics, or as a memorial. The earliest stūpas were tombs.'—(Vincent Smith, Gloss. to Cunningham's *Arch. Surv. Reports*.)

[1] 'Considerable interest is attached to the recent discovery (in Japan) beneath the corner stones of the Double-Bridge (main entrance to the Imperial Palace) of eight human skeletons. Most of the skeletons were found upright about twelve feet below the bed of the Palace moat which is at present undergoing repair work necessitated by the earthquake of 1923.'

'The theory of some Japanese scientists is that the skeletons are the remains of persons who, several centuries past, offered themselves as "human pillars" for the immortalization of the corner-stones used in constructing Edo Castle. The tradition of the "human pillars" is an old one in Japan. In a past age it was believed that if human beings were buried alive beneath the corner-stones of great structures, the gods would accord permanent strength and solidity to the foundations, and in addition, those who thus sacrificed themselves, would become immortal. It was considered that those chosen as "human pillars" were greatly honoured. They were buried alive in a standing position.'

'The first traditional instance of the "human pillars" recorded in Japan dates back to the reign of Emperor Nintoku, more than a thousand years ago. The Yodo river at Osaka, where the Emperor had his palace, used to overflow each year, drowning many people and causing much damage. Every dike built by the best engineers was unable to withstand the floods. One night, it is said, the Emperor dreamed that the gods had advised him if he would use human bodies as pillars for the construction of the embankments, there would be no more flood trouble. The story has it that the Emperor immediately caused human beings to be buried alive beneath the foundation stone of the dike, and since then the embankment has withstood all floods.' (*Associated Press of America Dispatch*, Tokio, July 11, 1925.)

(2) '*Stūpas or Topes*—These, again, may be divided into two classes, according to their destination; first, the true Stūpas or towers erected to commemorate some event or mark some sacred spot dear to the followers of the religion of Buddha; secondly, Dagobas or monuments containing relics of Buddha, or of some Buddhist saint. If it were possible these two ought always to be kept separate, but no external signs have yet been discovered by which they can be distinguished from one another, and till this is so, they must be considered, architecturally at least, as one.'

'In Nepal, according to Hodgson, and, I believe, in Tibet, the monuments, which are called stūpas in India, are there called Chaityas. Etymologically, this is no doubt the correct designation, as chaitya-like stūpa, means primarily a heap or tumulus.'—(Fergusson, *Hist. of Ind. and East. Arch.*, p. 50, note 2.)

For the photographic views and the architectural details of the following stūpas, *see* Fergusson:

The great Tope at Sanchi (p. 63, Figs. 10, 11, 12).
The cut in the rock on a Dagoba at Ajanta (p. 64, Fig. 13).
Tope at Sarnath (p. 66, Fig. 14).
Temple at Buddh-Gaya (p. 70, Fig. 16).
The great Tope at Amravati (p. 72, Fig. 17).
Gandhara Topes (description, pp. 72–76).
Jelalabad Topes (p. 78, Figs. 18, 19).
Manikyala Tope (pp. 80–82, Figs. 21, 22, 20, 23).

(3) 'A diversity of opinion exists as to the propriety or otherwise of calling such monuments as the high stūpa of Takkal Bala 'Tope'; and it must be said that this monument is a striking illustration of the inaccuracy of much that has been written on the subject. The following is one of the many instances where a conclusion has been somewhat hastily arrived at: . . . the term now used is "Thūp" . . . it is, therefore, much to be regretted that we should have adopted the word "Tope," which preserves neither the spelling nor the pronunciation of the true name.'—(*B.A.S.J.*, Vol. III, p. 313.)

(4) 'Again, Mr. Fergusson, writing on this subject, complains bitterly of the Bhilsa, and the Sarnath, and the Sanchi "Topes." To make the confusion worse he laments—"Tope is also the common Anglo-Indian word for a clump of trees." Very true, but that hardly justifies the following—"In neither sense is the word ever used by natives, who associate 'tope' with something very different, that is, with cannon or artillery. That the natives do use the word freely in designating such monuments, I will now endeavour to show. While they called all lower mounds in this neighbourhood dehiri, the peasantry denied the existence of a Thūpi,

Thūpa, Thūva, or even the common dīh ; and in my inquiries being compelled to paraphrase the word for their comprehension, after trying buland-tila and other expression in vain, I accidentally mentioned the much abused ' tope,' and was much surprised to find that they understood my meaning instantly, and helped me to a minute description of the monument and its surroundings.' They did not call it thūpa nor thūpi, but simply ' tope ' or, more correctly, ' top.' " Now, it would appear from the above that the word is no mere " adoption of ours," and that it is used by the natives of India (unless we allow the breadth of the Indus to make a fine distinction), moreover, by the commonest of those natives far and wide.'—(Cunningham, *Arch. Surv. Reports*, Vol. XIX, pp. 134, 135.)

(5) Takshaśilae ayaṁ thuvo pratithāvito sava-budhaṇa puyea ।

' This stūpa was erected at Takhaśilā (Takshaśilā) in honour of all the Buddhas.'—(Taxila Vase inscrip. *Ep. Ind.*, Vol. VIII, p. 297.)

(6) Thūva cha saṁghārāma cha ।

(Inscrip. on the Mathura Lion Capital, no. A, II, line 14, *Ep. Ind.*, Vol. IX, p. 141.)

STŪPA-GṚIHA—House of the tope, a sort of dome, supported by rows of pillars (as in Thūparāma Dagoba in Anurudhapur, Ceylon).

(W. Geiger, *Mahāvaṁśa*, p. 295.)

STŪPI—A dome, a cupola; a spherical roof rising like an inverted cup over a circular, square or multangular building, a pinnacle, a steeple-tower.

(1) *M.*, XI, 13 ; XV, 91 ; XVIII, 4, 413 ; XXII, 10, etc.

(2) Koṇa-pārāvataṁ kuryāt stūpy-āchchhādanakāni cha ॥
Su-muhūrte su-nakshatre stūpy-āchchhādanakaṁ nyaset ॥

(*Vāstu-vidyā*, ed. Gaṇapati-śāstri, XVI, 27, 37.)

(3) Kaṇṭhoktaṁ sarva-mānaṁ tu stūpy-utsedhaḥ prakīrtitaḥ ॥

(*Kāmikāgama*, XXXV, 30.)

(4) Ravi-varmā-mahā-rāja *alias* the Lord Kula-śekhara-deva was pleased to bathe up to the pinnacle (stūpi-paryyanta) the Vāṇakaiyilāya-Tirumalai (name of the central shrine) in the temple of the Lord of Tiruvīraṭṭāṇam, the Lord of Tiruvadigai, and to fix the stones which were bulging out (? stūpi-kīla).'—(Tiruvadi inscrip. of Ravivarman, line 3 f., *Ep. Ind.*, Vol. VIII, p. 9.)

(5) ' This inscription (*V. S. I. I.*, Vol. II, no. 90) records the gifts, by the priest Iśāna Śiva Paṇḍita, of eight gilt copper-pots. . . . A ninth pot was presented by Pavana-Pidāran. . . . The gilt copper-pots were all intended to be used as pinnacles (Stūpikkuḍam, para. 2).

Nine of them were presented, of which one is said to have been for the temple of the Lord (para. 9) and another for the temple of the Lord Śrī-Rājarājeśvara Mudaiyār (para. 11). The other seven appear to have been intended as pinnacles for the shrines of the regents of the eight quarters. The regents are eight in number, viz., Indra, Agni, Yama, Niṛriti, Varuṇa, Vāyu, Soma, and Īśāna. . . . The shrine of Indra, who is the regent of the East, seems to have been in the second gopura for which five pinnacles had apparently been provided by the king himself.'—(*V. S. I. I.*, Vol. II, no. 90, paras. 1, 2, p. 413 f.)

(6) 'The Gangai-koṇḍa-puram temple . . . consists of a nine-storeyed stūbi (steeple-tower) or vimāna over the shrine or sanctuary, 99 feet square at the base, and about 165 feet high.'—(*Ind. Ant.*, Vol. IX, p. 117, c. 2, para. 1.)

(7) *See* Chalukyan Architecture, *Arch. Surv.*, New Imp. Series, Vol. XXI, Plates LXXXII, Figs. 1, 2; LXXXIV, Figs. 1, 2; XCI.

See Cunnigham, *Arch. Surv. Reports*, Vol. III, Plates XLVI, Fig. 4 (Birdāban Stūpa), XLVII, Fig. 3 (Nongarh Stūpa); Vol. XI, Plate XXVII (plan and section of Mediaeval Stūpa); Vol. XVIII, Plates V, VI (Nirvāṇa-Stūpa); Vol. XIX, Plate III (Mahadeopur pinnacle).

STŪPI-KĪLA (*see* STŪPA and STŪPI)—The spire, the nail above the dome.

(*M.*, XVIII, 144.)

Cf. 'The Lord Śri-Rājarājadeva gave one copper waterpot (kūṭa), to be placed on the copper pinnacle stūpittari; according to Winslow, a synonym of Śikhara, or the upper pinnacle of a temple of the sacred shrine (Śri-Vimāna) of the Lord of the Śri-Rājarājeśvara (temple), weighing three thousand and eighty-three pala.'—(Inscrip. of Rajaraja, no. 1, line 18, *H.S.I.I.*, Vol. II, p. 9.)

STRĪ-LIṄGA—A class of buildings, a feminine type of architectural object.

See definition and other details under PRĀSĀDA.

Cf. Sarvatra bhoga-bhūmy-aṅgam alinda-pariśobhitam ।
Sarva (? shaḍ)-varga-samāyuktaṁ manaḥ-prīti-samanvitam ॥
Chaturṇām anta (m)-lomasāṁ (lokānāṁ) yogyaṁ strī-liṅgam ishyate ॥

(*Kāmikāgama*, XLV, 10, XXXV, 21; *see* under ŚĀLĀṄGA and SHAḌ-VARGA.)

STHA—A fixed abode as in Goshṭha and Pratishṭhā (*see* under these terms).

STHAṆḌILA—A site plan in which the whole area is divided into forty-nine equal squares.

(*M.*, VII, 8, VIII, 39 ; IX, 129, etc., *cf.* LXX, 30 ; *see* PADA-VINYĀSA.)

STHAPATI—*Lit.* chief (pati) of fixed abode (*stha* as in *goshṭha*, *pratishṭhā*, German stadt), the chief architect, the master builder.

(1) *Mānasāra* (Chap. II, named Śilpi-lakshaṇa or ranks and qualifications of architects) :

From the four faces of Brahman are stated to have originated the four heavenly architects, namely, Viśva-karman, Maya, Tvashṭṛi and Manu. And their sons are called respectively Sthapati, Sūtragrāhin, Vardhaki and Takshaka. These latter four evidently represent the four classes of terrestrial artists :

Pūrvānane viśvakarmā jāyate dakshiṇe mayaḥ ।
Uttarasya mukhe tvashṭā paśchime tu manuḥ smṛitaḥ ।
Viśvakarmākhya-nāmno'sya putraḥ sthapatir uchyate ।
Mayasya tanayaḥ sūtragrāhīti parikīrtitaḥ ।
Tvashṭur devarsheḥ putraḥ varddhakir iti prakathyate ।
Manoḥ putras takshakaḥ syāt sthapatyādi-chatushṭayam ।

(*M.*, II, 11–12, 17–20.)

Cf. One Manu is stated to be the architect who built the city of Ayodhyā :

Ayodhyā-nāma-nagarī tatrāsil loka-viśrutā ।
Manunā mānavendreṇa yā purī nirmitā svayam ।

(*Rāmāyaṇa*, I, 5, 6.)

Their ranks :

Sthapatyādiś chatur varṇaḥ śilpibhiḥ parikīrtitaḥ ।

(*M.*, II, 29.)

The Sthapati is in rank the director general and the consulting architect (*M.*, II, line 21). The Sūtragrāhin is the guide (guru) of Vardhaki and Takshaka (line 22), while the Vardhaki is the instructor of Takshaka (line 23). The Sthapati must be well versed in all sciences (line 24). He must know the Vedas (line 26). He must have all the qualifications of a supreme director (āchārya) (line 31).

Cf. Sthapatiḥ sthāpanayārhaḥ veda-vich chhāstra-pāragaḥ ।
Sthāpanādhipatir yasmāt tasmāt sthapatir uchyate ।
Sthapateś chājñayā sarve sūtragrāhyādayaḥ sadā ।
Kurvanti śāstra-dṛishṭena vastu-vāstu prayatnataḥ ।
Āchārya-lakshaṇair yuktaḥ sthapatir ity-abhidhīyate ।
Sthapatis tu sva-turyebhyas tribhyo gurur iti smṛitaḥ ।

(*M.*, II, 26–29, 31, 21.)

Sthapatiḥ sarva-śāstrajñaḥ—the chief architect knows all sciences. (*M.*, II, line 24.)

See also *M.*, XXXVII, 14, 15, 16, 17, 58, 73–74, 83, 85.

These passages refer to the Sthapati as the master of the opening ceremonies of a dwelling house.

The Sūtragrāhin also should have the general knowledge of all the sciences and the Vedas. But he must be an expert in measuring accurately and must make a special study in drawing (*M.*, II, 32, 34, 22, 25, 33, 23, 25, 34):

Śrutajñaḥ sūtragrāhī cha rekhājñaḥ śāstra-vit-tamaḥ । (32)
Sūtra-grāhīti sūtra-dhṛit । (24)
Sūtra-grāhī gurur dvyābhyāṁ turyebhyo'dya iti smṛitaḥ । (22)

The Vardhaki, too, should have the general knowledge of the Vedas and practical sciences. But the object of his special study is painting. He must also be able to design (vichārajña) architectural and sculptural objects from his own ideas. Like the Sūtragrāhin, the Vardhaki too should have an idea of accurate measurement.

Cf. Vardhakir māna-karmjñaḥ । (25)
Vichārajñaḥ śrutajñaś cha chitra-karmajño vardhakiḥ ॥ (33)
Takshakasya guruṛ nāma vardhakir iti prakīrtitaḥ ॥ (23)

The Takshaka must be expert in his own work, i.e., carpentry. He should be obedient to his superiors and aspire to rise in the rank.

Cf. Takshaṇāt takshakaḥ smṛitaḥ ॥ (25).
Takshakaḥ karma-vidyuś cha bala-bandhūdaya-paraḥ । (34)

(2) Sthapatiḥ sthāpanārhaḥ syāt sarva-śāstra-viśāradaḥ ॥
Na hīnāṅgo'tiriktāṅgo dhārmikas tu dayāparaḥ ।
Amātsaryo'nasūyaś cha tāntrikastv-abhijātavān ॥
Gaṇitajñaḥ purāṇajñaḥ ānandātmā py-alubdhakaḥ ।
Chitrajñaḥ sarva-deśajñaḥ satya-vādī jitendriyaḥ ॥
Arogī chāpramādī cha sapta-vyasana-varjitaḥ ।
Sunāmā dṛiḍha-vandhuś cha vāstu-vidyābdhi-pāragaḥ ॥

(*Vāstu-vidyā*, ed. Gaṇapati Śāstri, I, 12–15.)

'The Sthapati or master builder must be able to design (*lit.* placing, sthāpana). He must be proficient in all sciences (Śāstras, *see* below). He must not be deformed by lacking in or possessing too many limbs. He must be pious and compassionate. He must not be malicious or spiteful. He must be trained in music (tāntra=a stringed musical instrument, *see Vitruvius* below). He must be of noble descent. He must be a mathematician and historian. He must be happy in mind and free from greed. He must be proficient in painting. He must know all countries, i.e., he must be a geographist. He must be truthful, and possess self-control. He must not have any disease, and must be

above committing errors. He must be free from the seven vices (hunting, gambling, day-dreaming, blackmailing, addiction to women, etc., *see Manu-saṁhita*, VII, 47–48). He must have a good name and be faithful to friends. He must be deep in (*lit.* cross) the ocean of the science of architecture.'

Compare these qualifications of the master builder with those of the Greco-Roman architects quoted below from *Vitruvius*.

The classification of the architects and the account of their qualifications are almost identical to those given in the *Mānasāra* :

Sthapates tasya śishyo vā sūtra-grāhī sūto'thavā ।
Sthapaty-ājñānusārī cha sarva-karma-viśāradaḥ ॥
Sūtra-daṇḍa-pramāṇajño mānonmāna-pramāṇavit ।
Takshitānāṁ takshakeṇāpy upary-upari yuktitaḥ ॥
Vṛiddhikṛit vardhakiḥ proktaḥ sūtragrāhy-anugaḥ sadā ॥

(*Vāstu-vidyā*, *ibid.*, I, 16–18.)

Takshaṇāt sthūla-sūkshmāṇāṁ takshakaḥ sa tu kīrtitaḥ ॥
Mṛit-karmajño guṇī śaktaḥ sarva-karma-sva-tantrakaḥ ।
Guru-bhaktaḥ sadā hṛishṭaḥ sthapaty-ādy-anugaḥ sadā ॥

(*ibid.*, I, 18–19.)

(3) Suśīla(ś) chaturo daksha-śāstrajña-lobha-varjita(-taḥ) ।
Kshamāvān asya (syād) dvijaś chaiva sūtradhāra(ḥ) sa uchyate ॥

'One who is of good behaviour, clever, skilful, learned, free from lust (excessive desire of gain), can forgive (rivals), and belongs to the twice-born class, is called Sūtra-dhāra.'

(*Śilpa-dīpaka*, ed. Gaṁgādhara, I, 3.)

(4) Vāstu-vidhānajño laghu-hasto jita-śramaḥ
Dīrgha-darśī cha śūraś cha sthapatiḥ parikīrtitaḥ ॥

'One who is conversant with the architectural design (vidhāna, the act of arranging, disposing, etc.), skilful (*lit.* swift at hand), industrious (or patient labourer), and foresees (everything), and is a champion (in architectural matters), is described as a sthapati.'—(*Matsya-Purāṇa*, *P. Dict.*).

(5) *Mahābhārata* (XII, 3243–3244) :

Sat-kṛitāś cha prayatnena āchāryyartvik-purohitaḥ ।
Maheshvāsāḥ sthapatayaḥ sāṁvatsara-chikitsakāḥ ॥
Prājñā medhāvino dāntā dakshāḥ śūrā bahu-śrutāḥ ।
Kulināḥ sattva-sampannā yuktāḥ sarvveshu karmmasu ॥

Sthapatis, meaning apparently architects, are stated here to be very learned, meritorious, patient, dexterous, champion, of large experience, of high birth, full of resources, and capable of application to all works.

Ibid., XIII, 5073–5074 :

Brāhmaṇa-sthapatibhyāṁ cha nirmmitaṁ yan niveśanam ॥
Tad āvaset sadā prājño bhavārthī manujeśvara ।

Here, a house built by a Brāhmaṇa and a Sthapati is specially recommended. Sthapati implies an architect but his caste is not clear from this passage.

Mahābhārata, XIV, 2520–2524 :

Tato yayau bhīmasenaḥ prājñaḥ sthapatibhiḥ saha ।
Brāhmaṇān agrataḥ kṛitvā kuśalān yajña-karmmaṇi ॥
Taṁ sa śāla-chayaṁ śrīmat saṁpratolī-sughaṭṭitam ।
Māpayāmāsa kauravyo yajña-vāṭaṁ yathā-vidhi ॥
Prāsāda-śata-saṁbādhaṁ maṇi-pravara-kuṭṭimam ।
Kārayāmāsa vidhivad-dhema-ratna-vibhūshitam ॥
Stambhān kanaka-chitrāṁś cha toraṇāni vṛihanti cha ।
Yajñāyatana-deśeshu datvā śuddhaṁ cha kāñchanam ॥
Antaḥ-purāṇāṁ rājñāṁ cha nānā-deśa-śamīyushām ।
Kārayāmāsa dharmmātmā tatra tatra yathāvidhi ॥

Here, too, Sthapati is apparently the architect who built the palace with jewelled floor, columns, arches, etc., and also the well-designed high gate-houses.

Ibid., v. 255 :

Tato'atibhīto rūpāt tu śakra āste vichārayan ।
Athājagāma paraśuṁ skandhenādāya varddhakiḥ ॥

Vardhaki is called here Takshan (*see* verses 256–266) not in the sense of carpenter but to imply an executioner.

(6) Vārttika of Kātyāyana on Pāṇini, 2 (*Pet. Dict*) :

Sūtra-grāha=yaḥ sūtraṁ gṛihṇāti na tu dhārayati ।
Sūtra-graha=yaḥ sūtraṁ gṛihṇāti dhārayati cha ।

This subtle distinction is not quite clear.

(7) Chaurapañchāśikā (ed. Bohlen, 7-3) :

Surata-tāṇḍava-sūtra-dhārī ।

(8) *Rāmāyana*, (II, 80, 2, etc.) :

Karmāntikāḥ sthapatayaḥ purushā yantra-kovidaḥ ।
Tathā vardhakayaś chaiva mārgino vṛiksha-takshakāḥ ॥

(9) Sakala-guṇa-gaṇālaṁkṛita-kṛitottamāṅgaru Parama-Brahmaniś chala-svarūpar upadeśa-p(r)arākaramaru Manu-Maya-Māṇḍabye-Viśvakarmma-nirmmitam appa Hem-migadeya mane enisida stoṭakācheru ।

'Of the Viśvāmitra-gotra, supreme Lord of Laṅkā-dvīpa-pura, possessed of property and vehicles, versed in all Śāstras, sought after to construct ornamental buildings and upper storeys, adorned with all good qualities his head sprinkled with sandal water from Śiva, in the unchanging form of Parama Brahma, distinguished in giving advice, of the Hemmigaḍe house created by Manu, Maya, Māṇḍabya, and Viśvakarma, was Stoṭakāchāri."—(*Ep. Carnat.*, Vol. v, Part I, Channarayapatna Taluq, no. 265 ; Roman text, p. 530, line 23 ; Transl., p. 237, para. 2.)

(10) This Praśasti was written by Skandasādhu, the son of Śri-kaṇṭha a descendant of a family of architects (sthapati-kula).

(Sholingur Inscrip. of Parantaka I, line 21-*Ep. Ind.*, Vol. IV, pp. 224, 225.)

(11) Sthapati-Kālisuta-Siṁgāli-kargi Navagrāma-draṅga vra(? lu)-dhajana ।

'The Sthapati (architect of the tank was) Siṁgālī Kargi, the son of Kāli, a Pandit (? vulha) from the Navagrama-draṅga (compare *Rāja Taraṅgiṇī*, Translation by Dr. Stein, Vol. II, p. 291, watch-station near mountain passes).'

(Dr. Stein Konow (Peshawar Museum inscrip. of Vanhadaka, line 6, *Ep. Ind.*,, Vol. X, p. 80, note 3 ; p. 81.)

(12) Visadru-sūtaḥ Kamau Śilpi—'Visadru's son, Kamau, the architect (of the fifth octagonal pillar, middle row, of the north-west cloister). This simple record of the architect or head mason Kamau is the most valuable inscription of the Lal Darwāza, as it is another proof of the truth of Fergusson's remark that the cause of the admixture of Hindu and Muhammadan styles in the Jaunpur was the employment of Hindu masons.'

(Dr. A. Führer, Sharqi Arch. of Jaunpur inscrip. XXVII, *Arch. Surv.*, New Imp. Series, Vol. I, p. 51.)

(13) Rājapālasya putreṇa pālhaṇena śilpinā ।
Utkīrṇṇā-varṇṇa-ghaṭanā vaidagdhi-viśvakarmanā ॥

'(The document) is engraved by the artist Palhana, son of Rājapāla who is a master of the art and craft.'

(Pachar Plate of Paramardideva, line 22, *Ep. Ind.*, Vol. X, pp. 49, 45.)

(14) Tvashṭṛi, a recognized architect, connected with (the ancestor of) both Sūtradhāra and Sthapati :

Tad-vād Vaṭākhyaṁ nagaraṁ vane'smin Tvashṭuḥ prasādāt kṛitavān Vasishṭhaḥ ।
Prākāra-vapropavanais taḍāgaiḥ prāsāda-veśmaiḥ su-ghanaṁ su-tuṁgaiḥ ॥
Bhānor gṛihaṁ daiva-vaśād vibhagnaṁ Vāsishṭha-pauraiḥ sukṛitaṁ yad āsīt ।
Āsīch cha Nāgāt sthapates tu Durggaḥ ॥
Durggārkkato Deuka Sūttra-dhāraḥ ॥
Asyāpi sūnuḥ Śivapāla nāmā ॥
Yenotkṛite'yaṁ suśubhā praśastiḥ ॥

(Vasantgadh inscrip. of Purnapāla, A. D. 1042, VV. 21, 27, 34, *Ep. Ind.*, Vol. IX, pp. 12, 13, 14, 15.)

(15) Sadāśivamahārāya-śāśanād Vīraṇātmajaḥ ।
Tvashtā śrī-vīranāchāryo vyalikhat tāmra-śāsanam ॥

(Kṛishṇapuram Plates of Sadaśivaraya, v. 107, *Ep. Ind.*, Vol. IX, p. 339.)

(16) Śila-śilpi—stone mason—(Govindapur stone inscrip. of the poet Gaṁgadhara, v. 39, *Ep. Ind.*, Vol. II, pp. 383, 342).

(17) Śilpin—engraver—(Vilapaka Grant of Venkata I, v. 62, *Ep. Ind.*, Vol. IV, pp. 277, 272).

(18) *Cf.* inscrip. from Dabhoi—(verse 112, *Ep. Ind.*, Vol. I, p. 31.)

(19) Vardhaki—carpenter, sculptor (Senart) :
Vaḍhakinā sāmiṇa veṇuvāsaput(e)na gharasa mugha kata ।

(Karle Cave inscrip. no. 6, *Ep. Ind.*, Vol. VII, p. 53.)

(20) Sūtradhāra—architect, artizan—(Bheraghat inscrip. of Alhanadevi, vv. 36, 37, *Ep. Ind.*, Vol. II, pp. 13, 17).

(21) Mason—(inscrip. from Dabhoi, v. 112, *Ep. Ind.*, Vol. I, p. 31).

(22) *Cf.* the first Praśasti of Baijnath—(verse 36, *Ep. Ind.*, Vol. I, pp. 107, 111).

(23) Sūtra-dhṛit—artizan—(Kudarkot inscrip., v. 17, *Ep. Ind.*, Vol. I, pp. 182–183).

(24) Sūtradhāra—sculptor—(Verawal image inscrip., line 5, *Ep. Ind.*, Vol. III, 303, 304).

(25) Si(śi)lā-paṭṭa-śubhe vaṁśe sūtra-dhārā vichakshaṇāḥ ।
Bhojūkaḥ Kāmadevaś cha karmmanishṭhā Halā sudhīḥ ॥

'(Born) in the auspicious family of Śilpāpaṭṭa, the conspicuous architects (were) Bhojūka, Kāmadeva, and the wise Halā, (who) were perfect in their work.'

'A Muhammadan ruler Jallāla Khojā, son of Iśāka, appointed these architects to build a Gomaṭh(a) (? cow-shelter), a garden, and step-well in the town of Baṭithāḍim.'

(Bhatihagarh stone inscrip., v. 12, *Ep. Ind.*, Vol. XII, pp. 46, 47, 44.)

(26) 'Gokarṇa-svāmī—who is set upon the pure peak of the Mahendra mountain, master (guru) of things movable and immovable, the sole architect (sūtra-dhāra) for the creation of all the world (sakala-bhuvana-nirmāṇaika-sūtra-dhārasya).'

(*Ep. Carnat.*, Vol. IX, Bangalore Taluq, no. 140 ; Roman text, p. 33, Transl., p. 26.)

(27) Kṛishṇa-suto-guṇāḍhyaś cha sūttra-dhāro'tra Naṇṇakaḥ ।
Etat kaṇvāśramaṁ jñātvā sarvva-pāpa-haraṁ śubham ।
Kṛitaṁ hi mandiraṁ śambhoḥ dharmma-kīrtti-vivarddhanam ॥
Here, Sūtra-dhāra is the architect who built the temple of Śiva.

(Inscription from the Mahadeva temple, vv. 29, 30, *Ind. Ant.*, Vol. XIII, p. 165.)

(28) Sūtradhāro'sya Haridāsanāmā—'the architect (employed on the repair of the temple of Dakshiṇāditya) was Haridāsa.

(Gaya inscrip. of Vikrama Samvat 1429, line 9, *Ind. Ant.*, Vol. XX, pp. 315, 313.)

(29) *Cf.* 'When the house is finished Brāhmaṇs and the friends of the family are feasted. The mistri (master-builder) attends the dinner and receives from the owner complimentary gifts, such as shawls, turban, clothes and money, as his merits and the generosity of his employer dictate.'

(*Ind. Ant.*, Vol. XXIV, p. 303, c. 2, last para.)

(30) 'The royal draughtsman (rāya or rāja sūtra-dhāri) Gopoja's younger brother Suroja engraved it.'

(*Ep. Carnat.*, Vol. V, Part I, Arsikere Taluq, no. 123 ; Transl., p. 168, line 2.)

(31) Svasti samadhigata-pañcha-mahā-śabda . . . svarādhipati-mahānāyaka-vibudha-vara-dayakan animitta Malla-vijaya-Sūtra-dhāri svāmidrohi . . . biruda, etc.

'Be it well (with various epithets, including), Malla-vijaya-sūtradhāri, the daṇḍanāyaka Lachimayya's son, of the ministry for peace and war, Hodimaiya and others (named) enlarging the town ; Rājimaiya, the master of the town, desiring to make a feast granted certain land (specified).'

(*Ibid.*, no. 194, Roman Text, p. 433 ; Transl., p. 187.)

(32) 'Born in the family of Viśvakarma, the architect of the three worlds, Viśvanātha—the son of Basavāchāriya, who was the son of Voḍeyappaya considered to be the jagad-guru—engraved it.'

(*Ibid*, Vol. V, Part I, Channarayapatna Taluq, no. 187 ; Transl., p. 207.)

(33) 'To Dāmoja, son of the carpenter Mādiyoja granted a rent-free estate.'

(*Ibid*, Vol. VI, Kadur Taluq, no. 57 ; Transl., p. 12.)

(34) 'Hail! There is no excommunication (balligavārte=bahishkāra, Mr. Venkaṭ Raṅgo Kaṭṭi) of the skilful people (bīnṇa-ṇigala, those

who are conversant with painting or architecture, Sanderson's *Canarese Dictionary*) of the world who have attained the favour (of the god), having given the paṭṭa, (a patent, royal grant or order), called mūme-perjeṛepu (and) the name of Tribhuvanāchārya to Śrī-Guṇḍa, whose (observance of the) established rules of conduct was unimpeded, the Sūtra-dhāri, who made the temple of the queen of Vikramāditya (II, of the Western Chalukyas), the favourite of the world; (and there is) immunity (parihāra) to the others who united themselves with the guilty man (doshika).'

(Sanskrit and Old Canarese inscrip. no. 99, lines 1–7, *Ind. Ant.*, Vol. x, p. 164, notes 6–10.)

(35) 'Hail! Let it be known that these are the the names (not given) of the Āchārya who averted the excommunication (viḷḷiga-vārte=bahishkāra) of the skilful people (better perhaps "those who are conversant with painting or architecture") of this district, after that they had given the mūme-perjeṛepu to the Sūtra-dhāri who made this temple of Lokeśvara (still exists under the name of god Virūpāksha, Ante p. 163, c. 1, paras. 3, 1, 2) of Lokamahādevī (the queen) of Vikramāditya, the worshipful one, who three times conquered Kānchī.'

'Hail! Śrī-Sarvasiddhiāchārya, the asylum of all virtuous qualities, the Pitāmaha (Brahma, i.e., the Creator), the maker of many cities and houses; he whose conversation is entirely perfect and refined, he who has for a jewelled diadem and creast-jewel the houses and palaces and vehicles and seats and couches (that he has constructed), the (most eminent) sūtradhārī, of the southern country.'

Svasti-Śrī-sarva-siddhi-āchāri sakala-guṇāśraya-aneka-pura vāstu-Pitāmahān sakala-nishkala-sūkshmātibhāshitau vāstu-prāsāda-yānāsana-śayana-maṇi-makuṭa-ratnachūḍāmaṇi-te(ṁ)kaṇa-diśeya-sūtra-dhārī.

(Sanskrit and Old Canarese inscrip. no. 100, Ante p. 165.)

(36) 'Hail! The grant that was given of Śri-Vijayāditya and Vikramāditya . . . the grant that was given to the temple of (the architect Avanta-guṇa—(was) a stone seat (pāṛe) and a bracelet (?) to the temple of (the god) Śri-Lokapāleśvara, after having given the office (sthāna, *see* below) of the holy Añjanāchārya to the holy Devāchārya (datti Añjanāchārya bhagavantarggc koṭṭu Śrī-Lopapāleśvarakam pāṛe balli).'

'Sthāna may mean the office of the priest of the temple, or the locality, i.e., allotment of land, belonging to the holder of that office.'

Cf. Mānasāra, II, 25–26, above. (The first meaning suits the context better.)

(*Ibid.*, no. 101, pp. 165, 166, and note 18.)

(37) 'Hail! Chaṭṭara-Revadi-Ovajja (Ojhā, *see* below) of the Sarva-siddhi-Āchāryas, who was acquainted with the secrets of Śrī-śilemuddas (śilā-mudda, the name of some particular guild of stone masons), made the southern country.'

'(Old Canarese) Ovajja is perhaps the (modern) Canarese ojja, a priest, preceptor' (exactly the same meaning as āchārya etymologically indicates).

(*Ibid.*, no. 114, pp. 170–171, 172, notes 57, 58.)

'In addition to recording . . . the re-admission into caste of the artisans of the locality, this inscription (no. 100) gives several titles of the builder of the temple. Among them is that of Sarva-siddhi-Āchārya. The Sarva-siddhi-Āchāryas are mentioned again in no. cxiv below, and seem to have been some celebrated guild of architects or builders.'

(Dr. Fleet, *Ind. Ant.*, Vol. x, p. 164, c. 2, para. 2.)

'In addition to recording the name of Guṇḍa as the builder of the temple, this inscription (no. 99), as also the next (no. 100) seems to be intended to record the re-admission into caste of the artisans of the locality, who had been outcasted for some act which is not stated. The purport of this portion hinges entirely upon the meaning to be given to the word baḷḷigavārte (in nos. 99 and 100).'

Dr. Fleet is not quite certain whether he should agree with Mr. Kaṭṭi who says that 'it sounds to him like the Dravidian equivalent of the Sanskrit bahishkāra.'—(*Ibid.*, pp. 163–164, last para.)

'The Sūtra-dhāri or Sūtra-grāhī, "the holder of the thread" was the assistant of the sthapati, "the master-carpenter or master-mason," the architect.'—(Dr. Fleet, *Ind. Ant.*, Vol. x, p. 163, note 3.)

(38) It should be noted that Chāri, Āchāriya, Āchārya (with different prefixes), Ojhā, and Sūtra-dhārī are the surnames or titles of the Sthapati (master-builder) who is also called Āchārya in the *Mānasāra.* (*See* above.)

(The titles in another form—Āchārya or Āchāryya—are the surnames of the Jain teachers, of the famous philosopher Śaṅkara, and the distinguished astronomer Bhāskara.)

Here in these inscriptions we have seen that the architects have many such titles, namely, Āchāri (no. 99, line 4, no. 100, line 8); Āchāriya (no. 100, line 7); Sarva-siddhi-Āchāri (no. 100, line 8); Sarva-sīddhi-Āchārjiya (-yya) (no. 114, line 2 f); Tri-bhuvanāchāri (no. 99, line 5); Añjanāchārya (no. 101, line 5); Devāchārya (no. 101, line 6); Ovajjā (=Ojhā, no. 114, line 4); Śile-mudda (?=śilā-marddaka or modaka, no. 114, line 1). The very same architects are again given the titles of Sūtra-dhāri (no. 99, line 3; no. 100, lines 4, 12).

The titles, Chāri and Āchāri, are frequently met with as the surnames of stone masons or engravers of Copper-plates or other Śāsanas in the *Epigraphia Carnatica* of Mr. Rice and also in the *South Indian Inscriptions* edited by Prof. Hultzsch and Venkkāyya ; compare the following :

(39) ' The nāga (i.e., the cobra on the slab on which the inscription is incised) has been made by Ṇaṭaka (Nartaka), the pupil of the Āchāriya (i.e., Āchārya) Idomorā (Indramayūra) of the town of Saṁjayanti.' ' Āchārya—probably means master(-mason), i.e., sthapati.'

(Banawasi Prakrit inscrip., line 2 f., *Ind. Ant.*, Vol. XIV, p. 334, notes, 20, 23.)

(40) Badhūvallabha-Mallasya vachanenaiva śāsaṅam tvashṭā Nandivarmāchāryya-dānasyāsya likhāmy-aham ।

' By order of Badhuvallabha-Malla I, the carpenter Nandi-varmāchārya inscribe the charter of this grant.'

(Bana Grant of Śaka 261, lines 50–51, *Ind. Ant.*, Vol. XV, pp. 176, 177.)

(41) ' The carpenter Vīraṇa, son of Muddaṇāchārya, was the engraver of the śāsana, for which he received one share in the village.'

(*Ep. Carnat.*, Vol. III, Seringapatam Taluq, no. 11 ; Transl., p. 9, line 3.)

(41*a*) ' It was engraved by the carpenter Varadapāchārya.'

(*Ibid.*, no. 15 ; Transl., p. 11.)

(42) ' The Śāsana was engraved by Śrīgiri, the son of the carpenter Varadapāchārya.'

(*Ibid.*, no. 15 ; Transl., p. 32.)

(43) ' And it is engraved by the carpenter Vīraṇāchārya, son of Malla.'

(*Ibid.* Maṇḍya Taluq, no. 55 ; Transl., p. 45, last para.)

(44) ' For the carpenter Mallana, son of Vīraṇāchārya, who engraved the grant, one share was given.' (A.D. 1474.)

(*Ep. Carnat.*, Vol. III, Malavalli Taluq, no. 121 ; Transl., p. 68.)

(45) ' It was engraved by Mallanāchārya, son of Vīraṇāchārya.' (A. D. 1513.)

(*Ibid.*, Nanjangud Taluq, no. 16 ; Transl., p. 97.)

(46) ' Kontāchāri, son of Konguṇi-āchārya, blacksmith of Bai . . . of Bāguli, fighting in the war along with the ruler of the nād, went to Svarga (died).'

(*Ibid.*, Vol. IV, Chamarajnagar Taluq, no. 20 ; Transl., p. 3.)

(47) 'Engraved by the carpenter Vīraṇāchārya, son of Mallana.' (*Ep. Carnat.*, Vol. IV, Transl., p. 41, no. 30.)

(48) 'And it was engraved by the carpenter Vīraṇāchārya, son of Vīraṇa.' (A.D. 1545.) (*Ibid.*, Nāgamaṅgala Taluq, no. 58 ; Transl., p. 128.)

(48*a*) 'And this copper śāsana was engraved by the carpenter Mallanāchārya, son of Vīraṇāchārya.' (A.D. 1515.) (*Ibid.*, Vol. V, Husan Taluq, no. 16 Transl., p. 5, para. 2.);

(49) 'Engraved by the carpenter Vīraṇāchārya, son of Vīraṇa.' (A.D. 1561.) (*Ibid.*, no. 7 ; Transl., p. 6.)

(50) 'Engraved by Appanāchārya, son of Viraṇāchārya." (A. D. 1524.) (*Ibid.*, no. 94 ; Transl., p. 29.)

(51) 'Mallanāchārya, son of Vīraṇāchārya, enjoys one share as the engraver.' (A. D. 1512.) (*Ibid.*, Belur Taluq, no. 79 ; Transl., p. 65.)

(52) 'Engraved by Vīraṇāchārya, son of Mallanātha.' (A.D. 1539.) (*Ibid.*, Part I, Belur Taluq, no. 197 ; Transl., p. 108.)

(53) 'By Mallana's son, the carpenter Vīraṇāchārya, was it written.' (A.D. 1535.) (*Ibid.*, Ariskere Taluq, no. 126, Roman text, last line ; Transl., p. 169.)

(54) 'Mallana's son carpenter Vīraṇāchārya wrote (or engraved) it.' (*Ibid.*, Channaraypattana Taluq no. 167 ; Transl., p. 199.)'

(55) 'Written by the Senabova Kalajāchāriya's son Īśvara.' (A.D. 1279.) (*Ibid.*, Vol. VI, Mudgere Taluq no. 72 ; Transl., p. 72.)

(56) 'The carpenter Vīraṇāchārya, son of Mallana, engraved it.' (A.D. 1513.) Engraved by Vīraṇāchārya, son of Gaṇapaya.' (A.D. 1587.) (*Ibid.*, Vol. VII, Shimoga Taluq, no. 83 ; Transl., p. 33.)

(57) 'Engraved by Vīraṇāchārya, son of Mallanātha.' (A.D. 1527.) (*Ibid.*, no. 85 ; Transl., p. 33.)

(58) Āchārya, distinctly mentioned as an " architect " :

Āchārya-dakshiṇe haste madhyamāṅguli-madhyame ॥ (4)
Parvaṁ mātrāṅgulaṁ jñeyaṁ . . . । (5)
Grāmādhva-kshetra-gaṇyeshu mānāṅgula-vidhānataḥ ।
Āchārya-dakshāṅgulibhir mite vyāsa-mīthādhikaiḥ (?) ॥ (7)
(*Suprabhedāgāma*, XXX, 4, 5, 7.)

Cf. Āchārya-lakshṇair yuktaṁ sthapatir ity abhidhīyate ।

(59) Vāstu-jñānam athātaḥ kamalabhavanāṁ muni-paramparāyātaṁ kriyate'dhunā mayedaṁ vidagdha-sāṁvatsara-prītyai ॥

(*Bṛihat-saṁhitā*, LIII, 1.)

' The knowledge of the science of architecture has come down from Brahman through an unbroken series of seers (sages). I am now dealing with this (science of architecture) for the pleasure (i.e., benefit) of the learned (educated, experienced, hence professional) astrologers (sthapatis, professional architects).'

Sāṁvatsara—astrologer (*see* Sir M. W. Dict. p.1102). Kern translates the last pāda as "to gratify clever astrologers" but he attempts no explanation as to why the astrologers in particular are to be gratified on "a work on the art of building" (Kern's translation of Vāstu-jñāna), which in fact forms no part of astrology proper. It is apparent that in Varāhamihira's time the astrologers were intimately connected with the work of professional architects (sthapati), as also the astronomers like Bhāskarāchārya and others; Śaṅkaraāchārya is, however, a philosopher.

Concerning the qulifications of architects it will be noticed that the sciences (*śāstras*) mentioned in the *Mānasāra* and other records examined above are not enumerated. But by "Śāstra" is generally meant (*cf.* M. W. Dict. *loc. cit.*) " any instrument of teaching, any manual or compendium of rules, any religious book or scientific treatise, any sacred book or composition of divine or temporal authority." It is sometimes known as Vidyā, meaning knowledge, science, learning, scholarship or philosophy. It also means practical arts, such as agriculture, commerce, medicine, architecture, sculpture, painting (*cf.* Śilpa-śāstra, Vāstu-śāstra, etc.). Śāstra or Vidyā has fourteen divisions, viz., the four Vedas, the six Vedāṅgas, the Purāṇas, the Mīmāṁsā, the Nyāya, and the Dharma or law; or with the four Upa-Vedas, 18 divisions; others reckon 33 and even 64 sciences, generally known as Kalās or arts (*see* under Kalā).

But the expression " versed in all śāstras " need not be taken in too literal a sense. What architects are expected to know can be inferred from the details given occasionally in many places in the *Mānasāra* and other works. The chapters on the selection of site and the minute examination of soil (*see* Bhū-parīkshā) will indicate an intimate knowledge of practical geology, which is essentially necessary for architectural purposes. The chapters on gnoman (*see* Śaṅku) and site plan (*see* Pada-vinyāsa) demand proficiency in mathematics (*see* also Jāla). The frequent references to the minute examination of trees and wood show a fair amount of knowledge in timber work (Botany). The examination of stones and bricks for building purposes, the preparation of different colours and mixtures of

different materials for painting, and the testing of jewels, etc., for decorative purposes, point to an acquaintance with chemistry and other allied sciences.

The chapter on the joining of wood (*see* Sandhikarman) will indicate a knowledge of everything architectural, however insignificant it may appear to a layman. The chapter on ornaments (*see* Bhūshaṇa) and mouldings (*cf.* Stambha) will show a high sense of æsthetics. A knowledge of the climate and weather of the locality where a house is to be built is essential to their work. The astrological and astronomical calculation is also frequently referred to. (*Cf. Mānasāra*, II, 40, quoted above, and *Bṛihat-saṁhitā*, LIII, 1.)

All these branches of knowledge are necessary for architects. Three out of the four architects forming a guild must be qualified generally in all of these. But each of the four must be expert in his own special subject. Takshaka must be an expert carpenter and joiner. Vardhaki must be expert in designing and painting. Sūtragrāhin must be an expert in drawing. The chief architect, Sthapati, should, in addition to all these qualifications, have an intuitive foresight so as to be able to calculate and decide everything quickly. This wise division of labour is necessary for successfully carrying out a big design in architecture or sculpture. From this it may be inferred that the architects of ancient India were once a well organized guild. It should be noticed that from the epigraphical records quoted above Dr. Fleet has come to the same conclusion.

It is very interesting to note that Vitruvius describes the qualification of architects in exactly the same way as given in the *Mānasāra* (and the other records quoted above). In both the treatises this topic is discussed at the beginning and in fact in the same place, the second chapter, which is preceded by a table of contents in the *Mānasāra*, and an introduction in *Vitruvius*.

'An architect,' says Vitruvius (Book I, chap. 1), 'should be ingenious, and adept in the acquisition of knowledge. Deficient in either of these qualities, he cannot be a perfect master. He should be a good writer, a skilful draughtsman, versed in geometry and optics, expert at figures, acquainted with history, informed on the principles of natural and moral philosophy, somewhat of a musician, not ignorant of the sciences of both law and physic, nor of the motions, laws, and relations to each other, of the heavenly bodies.'

'By means of the first-named acquirement, he is to commit to writing his observations and experience, in order to assist his memory. Drawing is employed in representing the forms of his designs. Geometry affords much aid to the architect: to it he owes the use of the right line and circle, the level and the square, whereby his delineations of buildings on plane surfaces are greatly facilitated. The science of optics enables him to introduce

with judgment the requisite quantity of light, according to the aspect. Arithmetic estimates the cost, and aids in the measurement of the works ; this assisted by the laws of geometry, determines those obstruse questions wherein the different proportions of some parts to others are involved. Unless acquainted with history, he will be unable to account for the use of many ornaments which he may have occasion to introduce. . . . Many other matters of history have a connexion with architecture, and prove the necessity of its professors being well versed in it.'

' Moral philosophy will teach the architect to be above meanness in his dealings, and to avoid arrogance ; and will make him just, compliant and faithful to his employer. . . . That branch of philosophy which the Greeks call the doctrine of physics is necessary to him in the solution of various problems ; as for instance, in the conduct of water. . . . Music assists him in the use of harmonic and mathematical proportion. It is, moreover, absolutely necessary in adjusting the force of the balistae, catapultae and scorpions. . . . Skill in physic enables him to ascertain the salubrity of different tracts of country, and to determine the variation of climates. . . . Law should be an object of his study, especially those parts of it which relate to party-walls, to the free course and discharge of the eaves' waters, the regulations of cesspools and sewage, and those relating to window lights. . . .

' Astronomy instructs him in the points of the heavens, the laws of the celestial bodies, the equinoxes, soltices, and courses of the stars ; all of which should be well understood, in the construction and proportions of clocks.'

It is important to notice that Vitruvius denies the necessity of an architect's being completely trained in ' all the sciences and arts ' as suggested in the *Mānasāra* :

' On this account Pythius, one of the ancient architects of the noble temple of Minerva at Priene, says in his commentaries, that an architect should have that perfect knowledge of each art and science, which is not even acquired by the professors of any one in particular, who have every opportunity of improving themselves in it. This, however, cannot be necessary ; for how can it be expected that an architect should equal Aristarchus as a grammarian, yet should he not (?) be ignorant of Grammar.'—(*Vitruvius*, Book I, chap. 1, translated by Gwilt.)

The social position of architects is not quite clear from the literary or epigraphical records examined above. But from the functions assigned to each of the four architects, it would appear that the first three, namely, Sthapati, Sūtragrāhin and Vardhaki, belong to the higher classes. Further, from the liberal presents and rewards given on each occasion equally to the Guru (preceptor) and the Sthapati, which are so frequently mentioned,

it seems probable that the Sthapati had an enviable position. This latter point might account for his excommunication mentioned in the epigraphical records quoted above.

STHĀNA—The place of standing or staying, any place, spot, locality, the abode, dwelling house, room, shrine, a monastic establishment.

(1) 'We, Kauśika-Nagama-Bhaṭṭana, a Śiva-Brāhmaṇa, in charge of the shrine (sthāna) of the temple of Tiruvallam-uḍaiyār at Tiruvallam.'

(Inscrip. of Rajendra, no. 55, line 4, *H. S. I. I.*, Vol. III, p. 113.)

(2) "List of shrines to which allotments were made :—Vīrabhadra-deva (1, 12), Brahmāṇī, Īśvarī (1, 13), Vaishṇavī (1, 14), Indrāṇī (1, 15)., Gaṇapati (1, 16), Chāmuṇḍeśvarī of the chief shrine (mūla-sthāna)'

(Inscrip. at Kolar, no. 66, *H. S. I. I.*, Vol. III, pp. 136–137.)

STHĀNAKA—A class of buildings in which the height is the unit of measurement, the temples in which the idols are placed in the erect posture.

(*M.*, XIX, 7–11, *see* under APASAṂCHITA ; *cf.* also XLVI, 30, XLVII, 1, LVIII, 11, etc.)

STHĀNĪYA—A city, a fortress, a site plan in which the whole area is divided into 121 equal squares.

(*M.*, VII, 13 ; *cf.* also IX, 365, 368, 478.)

A fortified city (*M.*, X, 41).

A fortress to defend 800 villages :

Ashṭa-śata-grāmyā madhye sthānīyaṁ, chatuś-śata-grāmyā droṇa-mukhaṁ,dvi-śata-grāmyā khārvaṭikaṁ, daśa-grāmī-saṁgraheṇa saṁgra-ṇaṁ sthāpayet ।

(*Kauṭilīya-Artha-śāstra*, Chap. XXII, p. 64, para. 4.)

Jana-pada-madhye samudaya-sthānaṁ sthānīyaṁ niveśayet ।

(*Ibid*, Chap. XXIV, p. 51, para. 2.)

STHĀṆU—A synonym of Stambha or column.

(*M.*, XV, 5, *see* under STAMBHA.)

STHĀPAKA—One who installs, actual worker, perhaps the principal assistant to the chief architect (sthapati), not the master who is called Kartā.

(*M.* XXXVII, in particular, *cf.* lines 7 and 34, 70–71.)

STHĀPATYA—A house relating to architects or architecture, architectural or sculptural workshop.

Analānila-koṇe vā sthāpatyālayam eva cha ।

(*M.*, XXXII, 78, *cf.* also 66.)

STHĀPANA-MAṆḌAPA—A room or pavilion where the idol is installed after it is washed and dressed, the sanctuary.

Prāsādābhimukhe sapta-maṇḍapaṁ kalpayet kramāt ।
Ādau cha snapanārthaṁ cha dvitīyam adhyayana-maṇḍapam ।
Viśeshaṁ snapanārthaṁ cha maṇḍapaṁ cha tritīyakaṁ ।
Chaturthaṁ pratimāgāraṁ pañchamaṁ sthāpana-maṇḍapam ।

(*M.*, XXXIV. 45–48.)

STHĀVARA-BERA—A stationary idol.

(*M.*, LI, 17, etc.)

STHIRA-VĀSTU—A permanent building.

Sthira-vāstu-kukshi-deśe tu chara-vāstu tathāpi cha ।
. . . garbha-śvabhraṁ prakalpayet ।

(*M.*, XII, 170–171, *see* also 43.)

STHŪṆA—The civic and sacrificial posts used as memorial pillars, symbolising royal and divine power to which offenders and sacrificial victims were tied, 'maintained by the Fathers', upon which 'Yama makes seats for the departed.' (*R.V.* X, 18, 3; *A.V.* XVIII, 3, 52), made of copper, bronze or iron (ayas, *R.V.* V, 62, 7, 8), a synonym of Stambha or column.—(*M.*, XV, 5; *see* under STAMBHA.)

SNAPANA-MAṆḌAPA—A class of pavilions used for bathing, a washing room.

(*M.*, XXXIV, 43–48, etc.; *Suprabhedāgama* XXXI, 96, 97; *see* under MAṆḌAPA.)

SNĀNA-DROṆI—Bathroom for a deity.

(*Champa*, by Mazumdar, p. 237.)

SNĀNA-MAṆḌAPA—A pavilion for bath, a bathroom.

(*M.*, XXXII, 74, etc.; *see* MAṆḌAPA.)

SNĀPANA-MAṆḌAPA—A washing room, a pavilion where idols are washed.

Snāpanārtha-maṇḍapaṁ chāpi snāna-maṇḍapam eva cha ।

(*M.*, XXXII, 74; *cf.* XXXIV, 46, 47, etc.)

SPHŪRJAKA—A class of twelve-storeyed buildings once prevailing in the country of Sphūrjaka (?).

Pāñchālaṁ drāviḍaṁ chaiva madhya-kāntaṁ kāliṅgakam ।
Virāṭaṁ keralaṁ chaiva vaṁśakaṁ māgadhaṁ tathā ।
Janakaṁ sphūrjakaṁ chaiva daśa-kāntaṁ prakīrtitam ।

(*M.*, XXX, 5–7; *see* under PRĀSĀDA.)

SYANDANA—A synonym of yāna or conveyance, a chariot.

(*M.*, III, 9, 10; XIX, 145.)

Cf. Viśāla-ratha-vīthiṁ cha syandanaṁ mandaropamam ।

'Built a car like the Mandara mountain and also broad roads (round the temple).'—(Kṛishṇapuram Plates of Sadāśivaraya, v. 57, *Ep. Ind.*, Vol. IX, pp. 336, 341.)

SVAYAMBHŪ—Self-revealed, a kind of phallus.

(*Kāmikāgama*, L, 35 ; *M.*, LII, 227 ; *see* under LIṄGA.)

SVAMIKĀRA—Svādhyāyaka, reader of sacred literature.

(*M.*, XL, 124.)

SVARGA-KĀNTA—A class of eight-storeyed buildings.

(*M.*, XXVI, 28–33 ; *see* under PRĀSĀDA.)

SVARṆA-LIṄGA—A kind of phallus, a phallus made of gold.

(*M.*, LII, 333, etc.)

SVA-VṚIKSHA—A type of round temple.

(*Agni-Purāṇa*, Chap. CIV, vv. 17–18 ; *see* under PRĀSĀDA.)

SVASTIKA—An auspicious mark, the *Omkāra* symbol, the fire cross, the sun symbol, a symbol for Buddha and Siddha, the crossing of the arms, the meeting of four roads, a type of village, a joinery, a window, a type of pavilion, a kind of phallus, a class of halls, a type of building, a sitting posture.

A class of two-storeyed buildings—(*M.*, XX, 94, 34–41 ; *see* under PRĀSĀDA).

A class of villages (*M.*, IX, 3, 330 ; *see* GRĀMA ; compare *M.*, XII, 76, 77, 146 ; XLIX, 152 ; LIV, 120 ; LVIII, 12).

A kind of joinery—(*M.*, XVII. 60).

A kind of window—(*M.*, XXXIII, 583 ; *see* under VĀTĀYANA).

A pavilion with three faces :

Dvi-vaktraṁ daṇḍakaṁ proktaṁ tri-vaktraṁ svastikaṁ tathā ।

(*M.*, XXXIV, 552.)

A class of mansions or halls (*M.*, XXXV, 3, 80).

A kind of phallus—(*M.*, LII, 4, 120).

(2) Aparo'nta-gato' lindaḥ prānta-gatau tad-utthitau chānyau ।
Tad-avadhi-vivṛitaś chānyaḥ prāg-dvāraṁ svastike śubhadam ॥

'The Svastika (building) is auspicious if it have the entrance on the east side, and one continual terrace along the west side, at the ends whereof begin two other terraces going from west to east, while between the extremities of the latter lies a fourth terrrace.'

Commentary quotes Garga:

Paśchimo'ntagato'lindaḥ prāg-antau dvau tad-utthitau ।
Anyas tan-madhye vidhṛitaḥ prāg dvāraṁ svastikaṁ śubham ॥

(*Bṛihat-saṁhitā*, LIII, 34, *J. R. A. S.*, N. S., Vol. VI, p. 286, note 1.)

A kind of octagonal building :

(3) *Agni-Purāṇa* (chap. CIV. vv. 20, 21 ; *see* under PRĀSĀDA).

(4) *Garuḍa-Purāṇa* (chap. XLVII, vv. 21, 23, 31–33 ; *see* under PRĀSĀDA).

(5) *Kāmikāgama* (xxxv, 89) refers to a mansion (śālā) :

Dakshiṇe chottare chaiva shaṇ-ṇetraṁ svastikaṁ matam ।
Pārśvayoḥ purataś chaiva chatur-netra-samāyutam॥

An entablature (*ibid.*, LIV, 7).

Ibid., XLII (named Svastika-vidhi) divides buildings into four classes namely, Jāti, Chhanda, Vikalpa, and Ābhāsa (vv. 3–4), which are described in detail (vv. 5–30).

(6) *See* the figure 卐 (specimens of Jaina sculpture from Mathura, *Ep. Ind.*, Vol. II, p. 311).

(7) ' The capacity of the well, well accounts for the time taken in its construction. There are four entrances leading into the well, and they are so constructed as to give it the shape of the svastika symbol 卐. (This should be compared with the village named Svastika.) From each of the entrances, a flight of steps leads to the interior of the well.'—(*Ep. Ind.*, Vol. XI, p. 155, para. 2, note 1.)

(8) ' In the inscriptions from the cave temples of Western India, Bombay, 1881, are given a quantity of clearly Buddhist Square Pāli Inscriptions from Kuḍā, Kārle, Śailawāḍi, Junnar, etc. Many of these contain Svastikas at the beginning and end. Kuḍā no. 27 has at the end 卍 ; but at the end of 29 is 卐 which occurs again at the beginning and end of Kārle inscriptions, and beginning and end of Junnar 30, at the beginning of Junnar 5, 20, 28, 32 and 34, and at the end of Junnar 32 ; while 卍 occurs at the beginning of Kuḍā 30 and of Junnar 6 and 27, and the end of 33. The form 卐 is found at the end of the Śailāwāḍi inscription, and 卐 at the end of Kārle 2. Thus cave temple disproves the theory that the Christian Svastikas point to the left or westwards, whereas the Indian including Buddhist and Jain Svastikas, point to the right or eastwards.'

(*Ind. Ant.*, Vol. XV, p. 96.)

(9) ' The Svastika is called by the Jains Sāthis, who give it the first place among the eight chief auspicious marks of their faith. It would be well to repeat here, in view of what follows, the Jain version of this symbol as given by Pandit Bhagwanlal Indraji (the Hathigumpha inscriptions, Udayagiri Caves, p. 7), who was told by a learned Yati that the Jains believe it to be the figure of Siddha. They believe that, according to a man's karma, he is subject to one of the following four conditions in the next life—he either becomes a god or deva, or goes to hell (naraka), or is born again as a man, or is born as a lower animal. But a Siddha in his next life attains to nirvāṇa and is, therefore, beyond the pale of these four conditions. The Svastika

represents such a Siddha in the following way. The point or bindu in the centre from which the four paths branch out is jīva or life, and the four paths symbolise the four conditions of life. But as a Siddha is free from all these, the end of each line is turned to show that the four states are closed for him.'

'The Buddhist doctrines mostly resemble those of the Jains, it is just possible that the former might have held the Svastika in the same light as the latter. In the Nasik inscription, no. 10, of Ushavadata, the symbol is placed immediately after the word "Siddham" a juxtaposition which corroborates the above Jain interpretation. We find the Svastika either at the beginning or end or at both ends of an inscription and it might mean Svasti or Siddham.' Mr. Y. S. Vavikar.'

(*Ind. Ant.*, Vol. xxvii, p. 196.)

(10) 'The usual Indian symbols are of frequent occurrence, e.g., the Svastika in various forms on most of the Plates and specimens of the familiar circular Sun-symbols.'

Mr. Fawcett quotes 32 sun and fire symbols of Plate I of Mr. Murray Ansley's papers on Asiatic Symbolism (*Ind. Ant.* Vol xv, p. 66) and says that 'the whole of these may be taken to be developments in various directions of the cross, and for Indian investigations of the Svastika.'

(*Ibid.*, Vol. xxx, pp. 413–414.)

(11) 'This emblem (the ancient mystic emblem of the Bon Religion Tungdrung 卐) in my view was invented to represent the Sun as the creator of East, South, West, and North, the little mark at the end of each line indicating the inclination of the sun to proceed from one point to the other.'

'Rev. A. W. Heyde of Ghūm tells me that Yungdrung as a monogram is said to be composed of the two syllables, 𑖢 su and 𑖨 ti, suti = Svasti.' Mr. A. H. Francke.

(Ladakhi pre-Buddhist marriage Ritual, *Ind. Ant.*, Vol. xxx, p. 132, paras. 1, 4.)

(12) 'Plate iv (facing p. 400), Fig. 2 (卍, 卐) contains two reversed forms of the Svastika (yungdrung).'

Mr. Francke refers to the above quotation 'for an explanation of this orm of Svastika in Ladakh,' and repeats that 'it is the emblem of the Bon Religion.'

(Notes on Rock-Carvings from lower Ladakh, *Ind. Ant.*, Vol. xxxi, p. 400, para. 3.)

(13) 'M. Burnouf holds that this mysterious and much debated symbo (Svastika 卐, 卐) is intended to denote the invention of the fire-drill, and preserve the sacred remembrance of the discovery of fire by rotating a peg in dry wood. It represents according to him, the two pieces of wood laid crosswise, one upon another, before the sacrificial altar, in order to produce

the holy fire. The ends of the cross were fixed down by arms, and at the point where the two pieces are joined there was a small hole in which a wooden peg or lance (pramantha, whence the myth of Promotheus, the fire-bearer) was rotated by a cord of cow-hair and hemp till the sacred spark was produced. The invention of the fire-drill would mark an epoch in human history. Mr. Tylor, in his *Early History of Mankind*, has largely shown its use at some period in every quarter of the globe, and it is conceivable that its invention would be commemorated by a holy symbol. After this Mr. Walhouse has shewn that both forms existed in all countries of Europe, Asia and Africa. "Its first appearance (in Europe) is on the pottery of archaic Greece, as on that in the British Museum ascribed to between the years 700 and 500 B.C." About India, he says that "a character nearly resembling the runic G, occurs in a Pāli inscription, and reversed 卐, in a rock-inscription at Salsette" (*J. R. A. S.*, Vol. xx, p. 250, etc.). He has also shewn that it is both a Buddhist, Jaina, and Christian emblem. "In our own day," says he, "it has become a favourite ornamental device,"—we may be sure with no thought of symbolism,—and archaeologist returning from India may observe it covering ceilings, cornices, fenders, and other ironworks.'

(*Ind. Ant.*, Vol. VII, p. 177, c. 2, para. 2 f.)

(14) 'In describing coin no. 3 of this series (*Numismatic Chronicle*, N. S., Vol. xx, pp. 18–48, p. 62) I pointed out that the place of the more definite place of the Sun, in its rayed wheel form, was taken up by the emblematic cross of the Svastika.'

'Under the advanced interpretation of the design and purpose of Svastika, from an Indian point of view, now put forward . . . the figure, as representing one of the received attributes of the Sun, was used conventionally, to typify the solar orb itself.' E. Thomas.

(*Ind. Ant.*, Vol. IX, p. 65, c. 1, para. 2; p. 66, c. 1, para. 2.)

(15) 'I come now to show that the figure called the Svastika symbolizes the idea of circumambulation, derived from the apparent movement of the sun from left to right round the earth. The idea is this, that if a person faces the east at sun-rising and follows its movement southward and westward he will turn with his right hand fixed towards an object supposed to be placed like the earth in relation to the sun, in the centre of a circle.

'The argument, therefore, amounts to this: that as the figure or the Svastika is found scattered through countries reaching from Japan to England, so also the custom of turning sunways, or with the sun, is equally widespread; and secondly, that as the Svastika is a sign of good luck, signified by its etymology, so also the practice of turning with the sun is considered a lucky or fortunate proceeding and turning in the contrary way, especially

among northern people, is dreaded as entailing a curse . . . ; the custom and the symbol, therefore, we argue are co-related.' Rev. S. Beal.

(*Ind. Ant.*, Vol. IX, p. 67, c. 2, para. 5 ; p. 68, c. 2, para. 2.)

(16) Mr. Sewel after quoting a number of theories on the origin of the symbol, namely, of General Cunningham (*Edinburg Review*, January, 1870), Rev. Haslam (*The Cross and the Serpent*, 1849), Mr. Brinton (*Myths of the New World*), Dr. J. G. Müller (*Geschichte der Amerikanischen Urreligionen*, p. 497), and of Mr. Baldwin (*Ancient America*, New York, 1879, p. 186), says ' for myself, I boldly range myself under Mr. Thomas's Sun-standard.'—(*Ind. Ant.*, Vol. X, p. 202, c. 1, line 6.)

(17) Mr. Murray-Ansley seems to agree with the theory that the Svastika has originally been an emblem of the sun. He correctly adds that ' in India Hindus belonging to certain sects are in the habit of tracing one or more figures of the Svastika on the outer walls of their houses.' He also mentions its use in connexion with the marriage presents in India and Spain.—(*Ind. Ant.*, Vol. XV, p. 93, c. 1, para. 1 ; c. 2, para. 2.)

(18) ' The svastika or fylfot is one of the most ancient symbols mankind has. Much is heard of it nowadays, and in one country much is seen of it, where it is presumed to be especially connected with the mysterious conception called Aryan[1], and with the Christian Faith as a national possession and discrimination. " Rise of a benign power " or " lucky time " is the meaning attached to it in Germany where it is supposed to have a German origin and an anti-Semitic signification.'

' Wherever the sign came from, it did not come from Germany. It is not a natural symbol of the Aryan race, which is not a race but a myth or scientific abstraction. It was not invented by European peoples. Fifteen centuries before India knew anything of Europe the sign was used by the people of the Indus valley, as is shewn by the great excavations on sites along that river, and those peoples were not Aryans or Europeans or Indo-Europeans, nor in any sense the direct anscestors of the Germans. Europe, it seems, knew nothing of the sign until a thousand years later than the date of the specimens found in large numbers in that part of India. When early Christians used it, as they often did, they were using something borrowed from older religions or civilizations. A good claim can be made out

[1]Adolf Hitler has, however, explained the significance of Svastika which is included in the new German flag—Red with a white disc in the centre bearing the black Svastika—as follows :

"The red expressed the social though underlying the movement (of the National socialists) ; white, the National thought ; and the Svastika signified the mission allotted to us—the *Struggle for the Victory of the Aryan Mankind* and at the same time the triumph of the ideal of the *Creative Work* which is in itself and always will be anti-semitic."—(*Mein Kampf*, 1939, pp. 409 note, 411.)

for Egypt as its inventor, where the symbol for created life was a cross with a circle on top or resting on the left arm, and that combined with the symbol for Divinity in the hieroglyphics (something like a small flag) might easily have developed into the svastika we know. From Egypt it could have spread over the Mediterranean world and the Near East, for there was much trade and travel in early days. SCHLIEMANN found both forms of it, the right and left handed, in the ruins of Troy, and it has been discovered also on Chaldaean bricks, in Egyptian temples, on vases of Cyprus, Hittite carvings, Etruscan pottery, in India's cave temples, on Roman altars and British runic monuments, in Tibet, China, Korea, Mexico, Peru, and in the prehistoric burial ground of North America. Germany's sole right to it is far from established.'

'The origin of its name is less disputed. Sanskrit has the credit—*su* (well) *asti* (is) *ka* (a noun ending) *Svasti* (it is well), India has said at the beginning of any auspicious act, and "it is well" is the meaning of the sign throughout the ages. "Life is beneficent." It indicates—we quote from a woman writer on symbolism—"That the maze of life may bewilder, but a path of life runs through it: *It is well* is the name of the path, and the key of life eternal is in the strange labyrinth for those whom God leadeth." A rival interpretation finds in the word another Sanskrit element, the *swa* (self) of *swaraj* and similar words, relating the svastika to the good that comes from one's own efforts, but that view has found little acceptance. In general man has seen in the sign an assurance that somewhere in this fluid difficult chaotic life there is stability and benevolence, and he reads it as an assurance that he should struggle on in hope.'

'For this reason some have sought its origin not in the religious symbolism of Egypt, but in the pattern of the heavens. In the sky only the Pole Star is stable and constant. All else moves round it. So the fixed, the reliable, the *dhruva* of the old Indian astronomers, became an assurance that there was the seat of a power kindly to man. Anyhow we must believe that India has given the larger part of the associations that have always gone with the Svastika, though it might come as a shock to some good Germans to be told that they are in the same line of thought as Hindus and Buddhists who begin an important piece of work with "svasti" and welcome a guest with "svastu" "be it well".'

(*Statesman*, October 14, 1934.)

The extensive literature dealing with this most ancient and popular symbol in its all aspects (viz. etymology, antiquity, various countries and peoples who employed it, and the four main theories of its significance) as summarized by the writer may be quoted (from the *Indian Review*, December, 1940, pp. 754–761) below:

The term 'Svastika' is etymologically composed of three parts 'su' (good, auspicious), 'asti' ('as' to be, 'ti' affix for third person singular

or the suffix 'ti' added to verbal root to form verbal or abstract noun, like 'gati' going; 'rati', love or love goddess, etc., thus 'asti' may be equivalent to 'sthiti', stay or settlement) and the suffix 'ka' (to imply possession of, as in Bāla (=hair) ka (possessing) which means a boy having his hair grown. This derivation of the term from Sanskrit is corroborated by the monogram Yungdrung which as quoted above is composed or two syllables, su (卐) and ti (卍) and is the mystic emblem (卐) of the Bon religion Tungdrung. Mr. A. H. Francke (*Ind. Ant.* xxx, 132) took this symbol to represent the sun as the Creator of East, South, West, and North, the little mark at the end of each line indicating the inclination of the sun to proceed from one point to the other. Thus the Sanskrit 'svastika' should imply any object possessing, indicating, or ending at an auspicious omen. This etymological meaning of the classic emblem has retained its original sense everywhere probably excluding Germany of Hilter's day. But there are various theories to explain its design and purpose.

According to some (*see* above M. Burnouf, Mr. Tylor, Mr. Walhouse, *Ind. Ant.*, Vol. VII, p. 177) the svastika symbol (卐 卍) is intended to denote the 'invention of the fire-drill, and preserve the sacred remembrance of the discovery of fire (at the neolithic age) by rotating peg in dry wood. The symbol represents the two pieces of wood laid crosswise, one upon another, before the sacrificial altar, in order to produce the holy fire. The ends of the cross were fixed down by arms, and at the point where the two pieces are joined there was a small hole in which a wooden peg or lance was rotated by a chord of cow-hair and hemp till the sacred spark was produced.'

The myth of Promotheus appears to have originated from *Pramantha* or lance. The invention of fire-drill marks an epoch in human history, Till then there was hardly much difference between men and beasts. For in the palæolithic or old stone age, men could use for defence and offence only the implements of wood, bone or stone, rude in form and entirely devoid of skilled workmanship. In the new stone age, however, higher type of implements came into use. Men then developed the intelligence and skill to grind and polish the rude instruments of earlier age in order to make more effective use of them. The neolithic men were not, like their Palæolithic fore-fathers, ignorant of the use of fire and the potter's art. They could then cook meat and fish. They could make with hand pottery which was later turned on wheel. They honoured their dead parents and relations by elaborate tombs frequently built of massive stones. This sort of ancestral worship was the beginning of the belief and faith in a Creator or the God, who is the ultimate father of all beings. Thus

if the svastika symbol be ascribed to the period when the production and use of fire became known to humanity it would claim a very great antiquity so far as India is concerned. For the discoveries at Mahenjo-Daro show unmistakably that at 3000 B. C. Indians not only knew the use of all metals including gold but culturally made an all-round progress, and this Mahenjo-Daro period must be at least 2000 years later than the new stone age when the production and use of fire became known to them.

It, however, should be noted that the fire-origin of svastika will militate against its root meaning. Because however useful fire may be, its main function is to burn or destroy whatever comes in contact with it. Thus it would be an emblem of destruction like cross with which Christ was crucified or murdered. But etymologically svastika must mean 'the good settlement' or an auspicious emblem as its later use will clearly show.

According to another school of thought as represented by Rev. S. Beal (*Ind. Ant.*, Vol. IX, p. 67 ff.), Mr. Sewel (*Ind. Ant.*, Vol. X, p. 202) and Mr. Murray-Ansley (*Ind. Ant.*, Vol. XV, p. 93 ff.) the svastika figure 'symbolizes the idea of circumambulation, derived from the apparent movement of the sun from left to right round the earth.' The idea appears to be this that if a person faces the east at sun-rising and follows its movement southward and westward, he will turn with his right hand fixed towards an object supposed to be placed like the earth in relation to the sun, in the centre of a circle.

This theory is corroborated by the world-wide use of the svastika symbol, so also the custom of turning sunways or with the sun, which is equally widespread. The further support to the sun theory is lent by the argument that 'the svastika is a sign of good luck, signified by its etymology, so also the practice of turning with the sun is considered a lucky or fortunate proceeding and turning in the contrary way is dreaded as entailing a curse.' Thus the custom and the symbol are co-related. The exponents of the cross-symbol theory of the svastika figure like Mr. Fawcett (*Ind. Ant.*, Vol. XXX, pp. 413-414) hold that the 32 sun and fire symbols (gathered together by Murray-Ansley (*Ind. Ant.*, Vol. XV, p. 66) 'may be taken to be developments in various direction of the cross.' This school of thought fail, however, to explain the appearance of svastika beyond a thousand years before the birth of Christ in connexion with whom the deadly weapon, cross, assumed a symbolic significance.

Numerous other theories adumbraded by General A. Cunningham (*Edinburg Review*, January, 1870), Rev. Halsam (*the Cross and the Serpent*, 1849), Mr. Brinton (*Myths of the New World*), Dr. J. G. Mühler (*Geschichte*

der Amerikanischen Urreligionen, p. 497), Mr. Baldwin (*Ancient America*, New York, 1879, p. 186), and many others associate the svastika figure with the fire, sun, or cross symbol and do not advocate an entirely separate origin.

The fourth group of theories as elaborated by Mr. H. K. Deb (*J. A. S. B.*, Vol. XVII, p. 229 ff.) and others associate the svastika symbol with the mystic syllable 'Om'. This syllable in Sanskrit consists of three letters 'a', 'u' and 'm', which are variously connected with the gods of Creation, Preservation, and Destruction, as well as with the three Vedas, the Ṛig, Sāman, and Yajus. But the sound 'o' of the mystic syllable is represented by a single letter which in the Brāhmi script looks exactly like one arm ( ) of the svastika figure ( ) and the nasal sound, 'm' is represented in Brāhmi by a small circle or dot with two ear-like projections ( ), which later on is shown by the dot only, with or without a crescent line below ( ). 'O' in grammar is stated to be a long vowel and it is held that in pronouncing the mystic syllable the 'o'-sound is lengthened by repetition and that the repetition is indicated in writing by two o's like a conjointed letter by placing them crosswise. And the nasal sound 'm', which is necessary in order to have a pause after a vowel sound, is indicated by a dot-like mark at the ends of the Brāhmi 'o'-symbol. Such dot-ending svastika figure is seen in numerous instances in Cunningham's *Coins of India* and in Rapson's *Coins of Andhras*, and D'Alviella's *Migration of Symbols* (p. 71), and in other places. In fact, this dot mark or a slight projection from the ends makes the svastika figure more ornamental.

If this identification of svastika with the 'Om' syllable, or the development of the former out of the latter, be accepted, three points would be further clarified. First, the auspicious character of the svastika figure will get support because the 'Om' syllable like the svastika figure is used at the commencement of something auspicious. The prefacing of 'Om' in pronouncing anything is followed down to this day by 'Svasti' (good luck) and it is also the practice to add 'Svasti' immediately after 'Om' in order probably to clarify or emphasize the meaning of the mystic syllable. Secondly, if the formation of the svastika figure from the joining of two Brāhmi o's in a crosswise manner be accepted a very great antiquity can safely be attached to this classic symbol, because the title 'Brāhmi' implies its origin from Brahma or the Creator Himself and the Brāhmi alphabet may be associated with the writings discovered at Mahenjo-Daro dating from 3000 B. C. Despite various other theories the indegenous origin of the Brāhmi can hardly be questioned although the history of its origin has yet to be written. Thus, thirdly, the Indian origin of the

svastika is further vouchsafed by the etymology of the term, which is unquestionably Sanskrit and Indian.

Before examining the very widely spread use of the svastika figure in Indian life and culture, it is desirable to notice briefly its antiquity and use in other countries, without, however, committing oneself about its migration from India, or its independent growth in other countries all over the world. Thomas Wilson in his book *Suastika* (Report of the Smithsonian Institution, 1894) has largely referred to the various objects of different countries whereupon the svastika mark has been found. 'The earliest undoubted reference of the svastika', as held by Mr. H. K. Deb, 'is said to be in connection with the Third city on the site of Hissarlik, identified with ancient Troy.' It is common also in the Fourth and Fifth cities on the same site, and is principally found there on spindle whorls, dating approximately from fourteenth or thirteenth century B. C. It is, however, a remarkable fact that this svastika was not found in the First and Second cities but emerged in a variety of forms in the Third or the burnt city. This fact clearly indicates that the svastika was foreign to Troy and that it was imported and introduced there about the middle of the second millenium B. C. Its importation from Vedic India is indicated by Professor Winckler's discoveries at Boghaz Kuei. It has been established by C. H. W. Johns (*Ancient Assyria*, 1912, p. 54) that about 1400 B. C. kings with Indo-Aryan names and worshipping vedic gods were ruling the region of Mitanni. 'The names Sutarna, Dushratta, etc., have a distinctly Indo-Aryan appearance. It is instructive to compare the name Gilukhipa, borne by a daughter of Sutarna I, who was also queen of Amernophis III of Egypt (c. 1400 B. C.) with the name Gurukshepa (Pargiter, *Dynasties of the Kali Age*, p. 9) borne by the third successor of Bṛihadbala of Kosala who had fallen in the Bharata War.' Ample evidence has been secured which goes to show that there was intimate inter-communication at that period among the different peoples inhabiting Asia Minor, Egypt and the Aegean Island, so that the Vedic religion obtaining in Mittani had many opportunities for circulation abroad. Earlier still, Mittani had been the centre of an extensive empire, and the migration of the svastika symbol to Troy in those days is intelligible enough (*J. R. A. S.*, Vol. XVII, p. 242).

In Greece the svastika appears on the archaic pottery ascribed to between the years 700 and 500 B. C. In the Thomas Wilson's list the Fig. 140 shows the Grecian geometric vase of Smyrna, Fig. 153 shows the geometric Grecian vase of Thesa., Fig. 155 shows another Grecian vase (oinochoe), and Fig. 130 shows the Naukratis vase of Greece. In the same list Fig. 186 shows the Cervetri-Italian cinerary Urn, and Fig. 171 shows the detail of

Rhodian vase. The Figs. 59 and 63 of the same list show the spindle whorl of Troy.

The svastikas composed of four small squares ( ) and the archaic cross type ( ) are found on old Greek coins and as an ornamental device on early Greek pottery in Samos, Cyprus, and Hissarlik. It is also to be found on early Latin, Etruscan, and Sicilian ornaments, coins, and pottery, as well as in Asia Minor and North Africa, especially where there had been Phoenician colonies. It is hardly to be found on Egyptian, Babylonian or Assyrian remains.

In the Museums of Sweden and Denmark there are several hundred gold bracteates which appear to have been worn as amulets or medals, frequently bear the svastika mark drawn both ways.

In the Roman Catacombs the svastika occurs not frequently, as a Christian symbol in Roman mosaic work in England, France, Spain and Algeria. It is abundant on pottery, ornaments, and weapons of Roman-British and Anglo-Saxon times, and of corresponding periods in Scotland, Germany, Switzerland, and Denmark. A sepulchre was found in Norfolk and another preserved at Cambridge, bear the svastika in continuous lines. A whole row of svastika surrounds the pulpit of St. Ambrose at Milan ; it is seen also on wall paintings at Pompeii, on ancient Athenian and Corinthian vases and in the large Mosaic in the royal garden at Athens. It is also found in Hungary, China and Japan where it is frequently used as a potters' marks (*Ind. Ant.*, Vols. VII and XIV). Clothes used in Spain for covering the trays, were bordered with the svastika only for ornamentation. Professor Max Müller found it in Bishop's Island near Konigswalde on the right bank of the *Oder*, near Guiben. It is seen also on a celtic Urn found at Shropham in Norfolk and now in the British Museum. The form of it ( ) known as the double sun snake of Scandinavia has been found on pottery in the Island of Cyprus, specimen of which is in the Museum of St. Germain in France. Svastika has also been found on a Christian tomb with a Latin inscription, discovered in 1879 at Rome. It is most rare and common in Norway, Denmark, and Sweden. A stock bearing the date 1809 in the Norwegian Museum in Stockholm is covered with svastikas of the double sun snake type ( ).

Professor Max Müller concludes that the svastika has been found in nearly every country of Europe (*Ind. Ant.*, Vol. XV, p. 94). In his *Early History of Mankind*, Mr. Tylor has shown the extensive use of the svastika symbol at some period in every quarter of globe as exemplified above. And Mr. Walhouse (*Ind. Ant.*, Vol. VII, p. 177) has identified both the right-handed and left-handed forms in all countries of Asia, Europe, and Africa.

130—Grecian vase NAUKRATIS—Wilson, The Svastika, Fig. 130.
140—Grecian geometric vase of Smyrna—Wilson, The Svastika, Fig. 140.
153—Grecian geometric vase of Thesa—Wilson, The Svastika, Fig. 153.
155—Grecian vase OINOCHOE—Wilson, The Svastika, Fig. 155.
171—Rhodian vase—Wilson, The Svastika, Fig. 171.
186—Cervetri-Italian Cinerary urn—Wilson, The Svastika, Fig. 186.

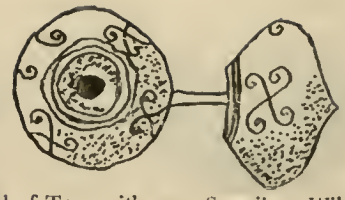


Fig. 63—The spindle whorl of Troy with ogee Svastika—Wilson, The Svastika, Fig. 63.

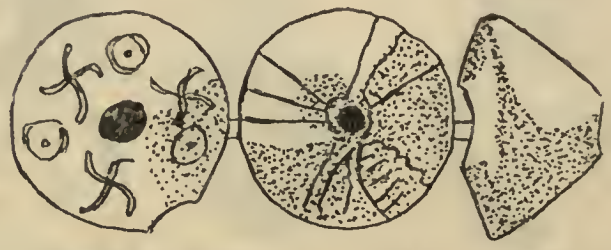


Fig. 59—Biconical spindle whorl of Troy—Wilson, The Svastika, Fig. 59.

Fig. 20—Indian coin, Eran, Fig. 20, Plate XI, in Cunningham's "Coins of Ancient India", containing snake pattern of Svastika.

Fig. 7—Indian coin, Ujjain, Fig. 7, Plate X, in Cunningham's "Coins o Ancient India". *(Reproduced through the courtesy of Smithsonian Institution.)*

In the land of its origin the svastika symbol, whether identified with the 'Omkāra' or not, has been popular, both as an auspicious emblem as well as an ornamental device, with the followers of Brāhmaṇism, Jainism and Buddhism. As referred to above, all pronouncement in Sanskrit commences with 'Om' and 'Svasti'. Several epigraphical records open with the svastika symbol. Coins also bear this symbol. For instance, in Cunningham's *Coins of Ancient India*, Fig. 20 of plate XI shows a unique specimen of eran coin, and Fig. 7 of plate X represents another interesting specimen of svastika with the Brāhmi 'o' and 'm' actually depicted.

The svastika is called by the Jains 'Sathis'. They give it the first place among the eight chief auspicious marks of their faith. Bhagwanlal Indraji (*Hathigumpha Inscriptions*, Udayagiri Caves, p. 7) testifies on the authority of Yatis that 'the Jains believe it to be the figure of Siddha, who is beyond the four conditions of life, viz. to become, after death according to one's action in life, a god or to go to hell or to be born again as a man or a lower animal.' The Siddha is represented by the svastika in this way. The point (bindu) in the centre from which the four paths branch out is Jīva or life, and the four paths symbolise the four conditions of life. But as a Siddha is free from all these, the end of each life is turned to show that the four states are closed for him (*Dictionary of Hindu Architecture*, pp. 734–35). Specimens of Jain sculptures from Mathura (*Ep. Ind.*, Vol. II, p. 311) contain this symbol.

The Buddhists appear to hold the svastika in the same light as the Jains. In the Nasik Inscription (no. 10) of Ushavadata, the symbol is placed immediately after the word 'Siddham', a juxtaposition which corroborates the Jain interpretation. The svastika appears at the beginning or end or at both ends of an inscription and it might mean the Brāhmaṇical 'Svasti' or Jain 'Siddham'. The Buddhist square Pali Inscriptions from Kuda, Karle, Sailawadi, Junar, etc., among the Inscriptions from the Cave Temples of Western India contain svastika at the beginning and end (卍 卐 卐 卐, *Ind. Ant.*, Vol. XV, p. 96).

In modern times it is a favourite ornamental device. It is found in buildings, covering ceilings, cornices, fenders and other iron, silver, gold and wooden works. It is used not only as 'an auspices mark and a symbol for Buddha and Siddha, but also as a sign for the crossing of the arms and as the meeting of the four roads.' It has been translated into a sitting posture. In the *Śilpa-śāstra* it has been elaborately worked out in the town-planning, and village schemes, in designing screens, lattice, joinery work, windows, pavilions, halls, and storeyed mansions, in digging wells, and carving the phallus or the emblem of Śiva (*Dictionary of Hindu Architecture*, p. 732 ff.). The *Mānasāra-Vāstu-śāstra* contain elaborate details of

svastika plan, of villages (Chap. IX, 3, 330; XII, 75-76, 146; XLIX, 152; LIV, 120; LVIII, 12), of joinery work (Chap. XVII, 60), of windows (Chap. XXXIII, 583), of Pavilions (Chap. XXXIV, 552) and of Halls and Storeyed Mansions (Chap. XXV, 3, 80). These references are further elaborated in the general literature. For instance the *Bṛihat-saṁhitā* (Chap. LIII, 34 ff.) contains a technical description of a svastika house: "The svastika (house) is auspicious if it have the entrance on the east side, and one continual terrace along the west side, at the end whereof begin two other terraces going from west to east, while between the extremities of the latter lies a fourth terrace" (Chap. LIII, 34 and *J. R. A. S.*, Vol. VI, p. 286).

The octagonal buildings of the svastika plan are described in the *Agni-Purāṇa* (Chap. CIV, vv 20-21), and the *Garuḍa-Purāṇa* (Chap. XLVII, vv. 21, 23, 31–33).

According to the *Kāmikāgama* (XXXV, 89 ff.) the distinguishing features of the svastika house are the six eyes (netra) in right and left, and the four eyes on the two sides and in front. Further details have been elaborated in the *Mānasāra-Vāstu-śāstra* where (Chap. XXXIV, 552) the characteristic features are stated to be the plough-shape and the three faces. This design has been followed in a structure erected at Allahabad near the Bharadwaj Ashrama of which several photographic views, measured drawings and a graphic description are included in the writer's *Hindu Architecture in India and Abroad.* The plough-shaped three-face design will not at the first sight disclose the usual svastika plan, which has various forms. The standard authorities on architecture have developed the plan of the svastika house in three different forms as described in the *Mānasāra*, the *Bṛihat-saṁhitā*, and *Agni-Purāṇa*, and *Garuḍa-Purāṇa.* The structure referred to above is in conformity with the Manasara's rules and satisfies all the essential requirements.

Thus there is some truth in the conclusion of Thomas Wilson (*ibid.*, pp. 951-952) when he says that since 'we find the svastika used on small and comparatively insignificant objects, those in common use such as vases, pots, juds, implements, tools, household goods and utensils, objects of the toilet, ornaments, etc., and infrequently on statues, altars and the like, the holy or sacred character of the svastika should be given up, and it should still with these exceptions be considered as a charm, amulet, token of good luck or good fortune, or as an ornament or decoration.'

Whichever theory of its origin be accepted—Om, Sun, Fire, or Cross the etymology of the term, svastika, justifies its Indian or Sanskrit, origin. And according to its derivative meaning its auspicious significance cannot be denied as long as the Sanskrit civilization and Hindu

culture will survive in this world. In India this classic symbol has taken a *corporal* body and the Hindus have been building their roads, towns, villages, images, various articles, and houses according to this plan. Thus in India, the place of its origin, it is not merely an auspicious figure but it has been developed into a more tangible sculptural and architectural object.

(*Indian Review*, December, 1940, pp. 754-761.)

SVASTIKA-KHAḌGA—A type of octagonal buildings.

(*Agni-Purāṇa*, Chap. CIV, VV, 20, 21 ; *see* under PRĀSĀDA.)

SVASTI-KĀNTA—A class of six-storeyed buildings.

(*M.*, XXIV, 53 ; *see* under PRĀSĀDA.)

SVASTI-BANDHA—A class of single-storeyed buildings.

(*M.*, XIX, 169 ; *see* under PRĀSĀDA.)

SVĀRĀSANA—The lintel, the top of a door.

'The Svārāsana of the gateway was made.'

(This inscription is on the top of the door of the Bhimeśvara temple.)

(*Ep. Carnat.*, Vol. X, Goribidnur Taluq, no. 2, Roman text, p. 260, Transl., p. 212 f.,

H

HAṬṬA—A market, a market-place, a fair.

(1) Saumya-dvāraṁ saumya-pade kāryā haṭṭās tu vistarāḥ ॥

(*Agni-Purāṇa*, Chap. CVI, v. 3.)

(2) Attra haṭṭaḥ mahā-janaś cha sthāpitaḥ—here the market-place and the shopkeeper (*lit.* big folk) were established.

Vichittra-vīthī-saṁpūrṇṇaṁ haṭṭaṁ kṛitvā gṛihāni cha—having constructed a market-place full of variegated (various) streets and houses (shops).

(Ghatiyala Inscrip. of Kakkuka, no. 1, v. 6 ; no. 11, v. 3 ; *Ep. Ind.*, Vol. IX, p. 280.)

(3) Niśrānikshepa-haṭṭam ekaṁ narapatinā dattam ।

'A bazar building or ware-house for storing goods to be exported was granted by the king.'—(The Chahamanas of Marwar, no. XXIII, Jalor stone Inscrip. of Śāmantasiṁhadeva, lines 22, 23, *Ep. Ind.*, Vol. XI, p. 62.)

HARIKĀ-KARṆA—A kind of leg for the bedstead.

(*M.*, XLIV, 60.)

HARITA—A pavilion with twenty two-pillars.

(*Matsyā-Purāṇa*, Chap. CCLXX, v. 13.)

HARITĀ—A moulding, an architectural ornament (*see* under MAṆḌAPA).

A moulding of the column (*M.*, XV, 160, *cf.* L. 106).

An ornament of the pedestal (*M.*, XXI, 31).

HARMIKĀ—The kiosk, the altar-like structure that rises on the summit of the cupola of a stūpa. The Nepalese stūpas 'decorate the *Harmikā* with painted human eyes, thus suggesting a human figure, in the posture of meditation hidden in the stūpa : the crossed legs in the base, the body up to the shoulders in the hemisphere, the head in the *Harmikā*. It was crowned by one or more umbrellas of stone and served as a receptacle of relics. "The resemblance of the *Harmikā* to a sacrificial altar is perhaps not unintentional, because the Holy one (Buddha), instead of sacrificing other beings, sacrifices himself to the world." Railing on the top of stūpa, Tee, Burmese Hti ; the lower part is called Gala (neck) and the whole chūḍāmaṇi. The umbrellas grouped over it are chhatravali and the shaft on which they are supported is Yashṭi. (Foucher, *L'Art Greco-Buddhique, tome i,* p. 97 ; Fergusson, Vol. I, p. 70, note 2.)

HARMYA (*cf.* RĀJA-HARMYA)—An edifice, an upper room, a turret, an apartment, buildings in general, a palace. A rich man's house. (*Amarakōsha, see* under PRĀSĀDA) including stables, etc. (*Ṛ.V.* I, 166, 4 ; VII, 56, 16 ; IX, 71, 4 ; X, 43, 3).

(1) One of the four divisions of the architectural objects :

Dharā harmyādi-yānaṁ cha paryaṅkādi-chatur-vidham ।

(*M.*, III, 3.)

Buildings in general including prāsāda (big buildings), maṇḍapa (pavilion), sabhā (hall), śālā (mansion), prapā (alms-house), (a)raṅga (theatre, play-house with quadrangular court-yards) (*ibid.*, 7-8).

Pūrva-hastena saṁyuktam harmyaṁ jātir iti smṛitam ।

(*M.*, XIX, 3.)

A palace :

Bhūpatīnāṁ cha harmyāṇāṁ lakshanaṁ vakshyate'dhunā ।

(*M.*, XL, I, etc.)

Harmya-janma-samārabhya sāla-janma-pradeśakam ।

(*M.*, LXIX, 37.)

Kuḍya-stambhe gṛiha-stambhe harmya-garbhaṁ vinikshipet ।

(*M.*, XII, 132.)

(2) Prāsāda-harmya-valabhī-liṅga-pratimāsu kuḍya-kupeshu ।

'In the temple, mansion, roof, phallus, idol, wall and well.'

(*Bṛihat-saṁhitā, J. R. A. S.*, N. S., Vol. VI, p. 332.)

(3) Harmyaṁ prāsāda-maṇḍitam—the edifice furnished with a temple.

(*Vāyu-Purāṇa*, part I, Chap. XXXIX, v. 57.)

(4) Prabhūta-śikharopetaṁ harmyaṁ nāma prakīrtitam—that is named *harmya* (edifice) which is furnished with a large tower or dome (śikhara).

(*Kāmikāgama*, L, 89.)

A class of buildings (*Ibid.*, XXXV, 39, 40 ; *see* under MĀLIKĀ).

(5) *Rāmāyaṇa* (II, 91, 32 ; IV, 33, 5) :

Harmya-prāsāda-saṁyukta-toraṇāni ।
Mahatīm guhām . . . harmya-prāsāda-saṁbādhām ।

See also II, 51, 21 ; II, 91, 32 ; III, 55, 7 ; IV, 33, 5 ; V, 15, 3, 19 ; VI, 75, 26, etc.

(6) *Mahābhārata* (Cock) :

I. 3, 133 ; Nāga-lokam. . . aneka-vidha-prāsāda-harmya-valabhī-niryūha-śata-saṁkulam ।

III. 207, 7 ; Harmya-prākāra-śobhanām . . . nagarīm ।

See also I, 3, 33 ; XV, 16, 1 ; V, 118, 19, etc.

(7) *Vikramorvasī* (Cock), p. 38 : Maṇihamma-alam (maṇi-harmya-talam.)

(8) *Mṛichchhakaṭika* (*ibid.*), pp. 47, 158 :

Jīrṇaṁ harmyam ; harmyasthāḥ striyaḥ ।

(9) *Raghuvaṁśa*, VI, 47, etc. :

Harmyāgra-saṁrūḍha-tṛiṇāṁkureshu . . . ripu-mandireshu ।

(10) *Jātakamālā* (VI, ed. Kern, p. 80, l. 20):

Vidyud-iva ghana-śikharaṁ harmya-talam avabhāsantī vyatish-ṭhata ।

(11) *Kathā-sarit-sāgara* (Cock), 14, 19:

Harmyāgra-saṁsthāḥ . . . paura-nāryaḥ ।

(12) Vapra-gopuramayair-nava-harmaiḥ ।

'By erecting new buildings adorned with a wall and a gate-tower.'

(Mangalagiri Pillar Inscrip., v. 29, *Ep. Ind.*, Vol. VI, pp. 121, 131.)

(13) Navīna-ratnojjvala-harmya-śṛiṁgam—'the top of the royal palace, the scene of the first act.'—(Dhar Praśasti of Arjunavarman, v. 8, *Ep. Ind.*, Vol. VIII, pp. 103, 99.)

(14) Madana-dahana-harmyaṁ kārayāmāsa tuṅgam sa guṇa-gaṇa-nidhāna-śrīmdrarājābhidhānaḥ ।

'Then that store of all virtues, the illustrious Indrarāja, ordered to be built this lofty temple of the destroyer of Cupid (Śiva.).'—(An Incrip. of Govinda III, v. 17 ; *Ind. Ant.*, Vol. VIII, pp. 41, 42.)

(15) Gommaṭa-pura-bhūshaṇam idu ।
Gommaṭam āyat ene samasta-parikara-sahitam ।
Sammadadiṁ Huḷḷa chāmū ।
Paṁ māḍisidaṁ Jinottamālayaman idam ॥

Parisūtraṁ nṛitya-gehaṁ pravipuḷa-viḷasat-paksha-deśastha-śaiḷa-sthira-Jaināvāsa-yugmaṁ vividha-suvidha-patrollasad bhāva-rūpotkara-rāja-dvāra harmmyaṁ beras atuḷa-chatur-vviṁśa-tīrttheśa-gehana ।

Paripūrṇṇaṁ puṇya-puñja-pratimam esudud īyandadiṁ Huḷḷa-nindam ।

Abstract :—' He also built an abode (or temple) for the Tīrthaṅkaras in this chief Tīrtha of Beḷguḷa. And he built a large Jina temple, which, like Gommaṭa, was an ornament to Gommaṭapura. Together with its cloisters, a dancing hall, a Jina house of stone on either side, a palace with royal gates adorned with all manner of carving, and an abode for the 24 Tīrthaṅkaras.'

(*Ep. Carnat.*, Vol. II, no. 137A., Roman text, p. 104, lines 21–28 ; Transl., p. 182, line 16f.)

HARMYA-KĀNTA—A class of seven-storeyed buildings.

(*M.*, XXV, 29 ; *see* under PRĀSĀDA.)

HARMYA-GARBHA—A top-room built at the topmost part of a building, a dining hall.

Hammiya-gabbho ti kuṭāgara-gabbho mudaṇuchchhādana-gabbha vā.

(Buddha-ghosha, *Chullavagya*, VI, 3, 3.)

Compare the translation by Oldenberg and Rhys Davids.

HARMYA-TALA—The flat roof of a house.

Chandrāṁśu-harmya-tala-chandana-tāla-vṛinta-hāropabhoga-rahite hima-dagdha-padme ।

' Which (on account of the cold) is destitute of the enjoyment of the beams of the moon, and (sitting in the open air on) the flat roofs of houses and, sandalwood perfumes, and palm-leaf-fans, and necklaces.'

(Mandasor stone Inscrip. of Kumaragupta, lines 17–18, *C. I. I.*, Vol. III, F. G. I., no. 18, pp. 83, 87.)

HASTA (*see* AṄGULA)—A cubit, a measure generally equal to 24 aṅgulas or 18 inches.

(1) Chatyāri-viṁśatiś chaiva hastaḥ syād aṅgulānāṁ tu ।

(*Brahmāṇḍa-Purāṇa*, part I, second anushaṁga-pāda, Chap. VII, v. 99.)

(2) Vāstu-śāraṇi (ed. Matri Prasada Pande, Benares) quotes the following without giving reference—Viśvakarmokta-hasta-pramāṇam :

Anāmikāntaṁ hastaḥ syād ūrdhva-vāhau savaṁśakaḥ ।
Kanishṭhikā-madhyamā-pramāṇenaiva kārayet ॥
Svāmi-hasta-pramāṇena jyeshṭha-patnī-kareṇa cha ।
Jyeshṭha-putra-kareṇāpi karma-kāra-kareṇa cha ॥

'According to this passage, the cubit is the measure of distance from the end of the forearm (? elbow) to the tip of the ring-finger, the little finger or the middle finger; and this cubit may be determined in accordance with the measure of the arm of the master of the house, his eldest wife, his eldest son, or of the architect who is employed to build the house.'

(3) Dvādaśa-hasta-pramāṇa-gṛiha-niveśanam ।

(Barmani Inscrip. of Vijayaditya, lines 22–23, *Ep. Ind.*, Vol. III, p. 213.)

(4) Pārameśvarīya-hasta—the 'royal yards.'

(Second Inscrip. of Villabhaṭṭasvāmin temple at Gwalior, line 4, *Ep. Ind.*, Vol. I, p. 159; *see* also p. 155.)

(5) Āyāmato hasta-śataṁ samagraṁ vistārataḥ shashṭir athāpi chāshṭau ॥

Utsedhato'nyat purushāṇi sapta . . . hasta-śata-dvayasya ॥

'(Built an embankment) a hundred cubits in all in length, and sixty and eight in breadth, and seven men's height in elevation . . . of two hundred cubits.'

(Junagadh Rock Inscrip. of Skandgupta, lines 20–21. *C. I. I.*, Vol. III., F. G. I., no. 14, pp. 61, 64.)

HASTI-NAKHA—The elephant's nail, a turret.

(*Kauṭilīya-Artha-śāstra*, *see* under GṚIHA-VINYĀSA.)

HASTI-PARIGHA (*see* PARIGHA)—A beam to shut the door against elephants.

(*Kauṭilīya-Artha-śāstra*, *see* under GṚIHA-VINYĀSA.)

HASTI-PṚISHṬHA (*cf.* GAJA)—A class of single-storeyed buildings, a part of a building.

(*M.*, XIX, 171, *see* under PRĀSĀDA.)

A part of a building (*Kāmikāgama*, L. 92, *see* under VIMĀNA).

'The present structure (of the temple of Parameśvara, where from the five Van inscriptions at Gudimallam are copied) is not after the common model of the period to which it belongs: the Vimāna has the so-called gaja-pṛishṭhākriti shape: but a close study of the plan and sections . . . warrant the conclusion that the architect had distinctly in view the liṅga.'

'The gaja-pṛishṭhākriti-vimāna is found only in Śaiva temples, e.g., the Dharmeśvara temple at Maṇimaṅgalam, the Śaiva temples at Sumaṅgalam, Peṇṇagaram, Bhāradvājāśrama near Arcot, Tiruppulivanam, Konnūr near Madras, Vaḍa Tirumullaivāyil, etc. etc.'

(*Ind Ant.*, Vol. XL, p. 104, note 2.)

See the plan and sections of the Parameśvara temple at Gudimallam (*Ibid.*, plate between pp. 104, 105).

See the *Pallava Antiquities* (Vol. II, pp. 19–20, plate III, the Pallava temple at Tiruttaṇi; plate I, the Vīraṭṭaneśvara temple at Tiruttaṇi and Sahadeva Ratha at Mahābali-puram).

See Fergusson, *Hist. of Ind.* and *East. Arch.*, Vol. I., p. 127 (Fig. 51, elevation of Chezrala Chaity temple), p. 336 (Fig. 192, plan of Sahadeva's Ratha), p. 337 (Fig. 193, view of the same Ratha).

HASTI-HASTA—The trunk of an elephant, employed as an architectural member generally of the stair-cases.

Dvāra-mukha-sopānaṁ hasti-hastena bhūshitam ।

(*M.*, XIX, 211.)

Sopāna-pārśvayor deśe hasti-hasta-vibhūshitam ।

(*M.*, XXX, 155, *cf.* also XVIII, 209.)

HAṀSA—A type of building which is shaped like the swan, a class of oval buildings.

(1) *Bṛihat-saṁhitā* (Chap. LVI, 26, *J. R. A. S.*, N. S., Vol. V, p. 319, *see* under PRĀSĀDA).

(2) *Matsya-Purāṇa* (Chap. CCLXIX, vv. 30, 51, *see* under PRĀSĀDA).

(3) *Bhavishya-Purāṇa* (Chap. CXXX, vv. 33, *see* under PRĀSĀDA).

A class of oval buildings :

(4) *Agni-Purāṇa* (Chap. CIV, vv. 19–20, *see* under PRĀSĀDA).

(5) *Garuḍa-Purāṇa* (Chap. XLVII, vv. 29-30, *see* under PRĀSĀDA).

(6) The vehicle (riding animal) of Brahmā.

(*M.*, LX, 1, 4; the sculptural description of its image, *ibid.*, 5–46.)

HĀRA
HĀRĀ
HĀRIKA(-Ā)
—A chain, a chain of 108 strings of pearls worn round the neck (*Bṛihat-saṁhitā*, LXXXII, 32), an architectural ornament employed below the neck of the column, bead, astragal or baguette (*see* Gwilt, *Encycl.*, Fig. 873).

(1) A moulding (bead) of the column :

Tat-(padma)-tungārdhaṁ tu hārikam ।

(*M.*, XV, 58.)

Hārā-śrāntā-pañjarāḍhyaṁ . . . (vimānam)।

(*M.*, XIX, 194, *see* also XX, 56, 112.)

Adhiṣṭhānaṁ cha pādaṁ cha prastaraṁ cha tri-vargikam ।
Śālā-kūṭaṁ cha hāraṁ cha yuktyā tatraiva yojayet ।

(*M.*, XXII, 73–74.)

Kūṭānām eka-bhāgena śeshaṁ hāraṁ sapañjaram ।

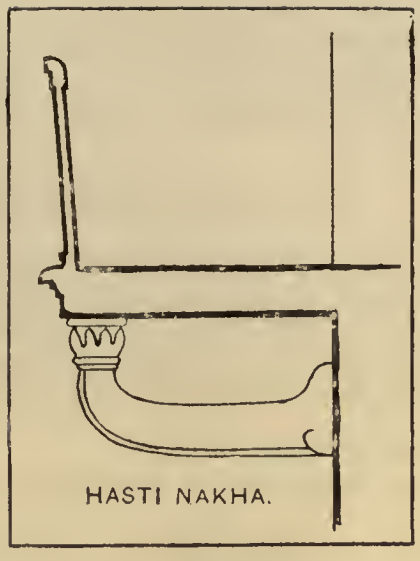
(*Ibid.*, 86.)

Hāraṁ sapañjaram ।

(*M.*, XXI, 58.)

Chatush-koṇe chatush-kūṭaṁ koshṭhe hārādir ashṭadhā ।
Anu-śālā tri-bhāgā vā hārāntara(ṁ)-dvi-bhāgikam ।

(*M.*, XXVI, 11, 23.)



HASTI NAKHA.

HASTI HASTA

In connexion with the gopura or gatehouse :

Hārasya madhya-deśe tu anu-śālā-viśālakam ।
Tat-pārśva-dva(ya)yo(r) hāraṁ nāsikā-pañjarānvitam ।
(*M.*, XXXIII, 449–450.)

Ekāṁśaṁ karṇa-kūṭaṁ cha hāra-tāraika-bhāgikam ।
(*M.*, XXXIII, 416 ; *see* also 431.)

Kūṭe cha bhadrayor madhye hārāṁśaṁ madhyamena tu ।
(*M.*, XXXV, 343.)

A chain :

Hāropagrīva-keyūra-kaṭakaiś cha supūritam ।
(*M.*, L, 14.)

(2) Alindāndhārikāndhara-hārā bhāgena kalpitāḥ ॥
Bahir āndhārikāndhara-hāra(-ā) bhāgena vistṛitāḥ ॥
Hāra-pramāṇaṁ bāhye tu rachanārthaṁ prakalpayet ।
Bhitty-antasthaṁ pramāṇaṁ syād bhitti-bāhye tv-abāhyataḥ ॥
Āndhārāndhāri-hārokto (=hāra-yukto) khaṇḍa-harmya-viśe-shitam (vimānam) ॥
(*Kāmikāgama*, L, 74, 76, 77, 93.)

(3) Pearl-strings (Deopara Inscrip. of Vijayasena, v. 11, *Ep. Ind.*, Vol. I, pp. 308, 313).

HIKKĀ-SŪTRA—The line over the glottis or along the larynx, upper part of the windpipe. (*See* under TĀLAMĀNA.)

HIMA-KĀNTA (*cf.* HIMAVAT)—A class of seven-storeyed buildings.
(*M.*, XXV, 31, *see* under PRĀSĀDA.)

HIMAJA—A class of pavilions.
(*M.*, XXXIV, 152, *see* under MAṆḌAPA.)

HIMAVAT—A class of buildings, with sixteen pañjaras (compartments), eight sālāś (halls), and eight kūṭas (towers).

Himavān iti vikhyāto yukta-shoḍaśa-pañjaraḥ ।
Ashṭa-śālāshṭa-kūṭas tu prāsādo lakshaṇānvitaḥ ॥
(*Suprabhedāgama*, XXXI, 44.)

HIRAṆYA-NĀBHA—A type of edifice.

Uttara-śālā-hinaṁ Hiraṇya-nābhaṁ tri-śālakaṁ dhanyam—'An edifice with three halls, wanting as it does a northern hall, is styled Hiraṇya-nābha, and insures luck.'
(*Bṛihat-saṁhitā*, LIII, 37, *J. R. A. S.*, N. S., Vol. VI, p. 286.)

HEMA-KŪṬA—A class of pavilions.
(*M.*, XXXIV, 155, *see* under MAṆḌAPA.)

HOMA—An offering, a crowning moulding of the cages for domesticated animals.

Mṛiga-nābhi-viḍālasya pañjarasya . . . ।
Homāt prastarāntaṁ vā mastakāntaṁ-śikhāntakam ।
(*M.*, XXXIV, 17.)

APPENDIX I

A SKETCH OF SANSKRIT TREATISES ON ARCHITECTURE [1]

A

AGNI-PURĀṆA—*See* under PURĀṆAS.

AṄKA-ŚĀSTRA—On architecture.

(Oppert's *List of Sanskrit MSS. in Private Libraries of South India*, Vol. I, no. 2499, p. 228.)

APARĀJITA-PṚICHCHHĀ—by Bhuvana-deva, 'quoted by Hemādri in the Pariśesha-khaṇḍa, 2, 660-662, 819.'

(Aufrecht, *Catalogus Catalogorum*, part II, p. 4.)

APARĀJITA-VĀSTU-ŚĀSTRA—attributed to Viśvakarman, in possession of Maṇi Śaṇkara Bhaṭṭa, Surat.

(*Catalogue of Sanskrit MSS. contained in Private Libraries in Gujarat, Kathiavad, Kachchh Sindh, and Khandesh*, 1872, p. 276, no. I.)

ABHILĀSHITĀRTHA-CHINTĀMAṆI—by Malla Someśvara, on architecture.

(Taylor's *Catalogue Raisoneé*, I. 478.)

ARTHA-ŚĀSTRA—(KAUṬILĪYA)—ed. R. Shama Sāstri, B.A., Mysore, 1919.

Chapters :

22. Janapada-niveśa.
23. Bhūmichchhidra-vidhāna.
24. Durga-vidhāna.
25. Durga-niveśa.
65. Vāstuka, Gṛiha-vāstuka.
66. Vāstu-vikraya ;
    Sīmā-vivāda ;
    Maryādā-sthāpana ;
    Bādha-bādhika.
67. Vastuke vivīte kshetra-patha-himsā.

[1] Compare, Vārtta—The Ancient Hindu Economic by Narendra Nath Law M.A., B.L., PH.D. (*Ind Ant.*, vol. XLVII, p. 256).

AṀŚUMAT-(KĀŚYAPĪYA)—On architecture and sculpture.

(Taylor's *Catalogue Raisonée*, I. 314.)

AṀŚUMAD-BHEDĀGAMA—*See* under ĀGAMAS.

AṀŚUMĀNA-KALPA—On architecture.

(Aufrecht, *ibid.*, part I, p. 1.)

Ā

ĀGAMAS—Of the 28 Mahā-āgamas[1], the following have special reference to architecture and cognate arts:

I. *Aṁśumad-bhedāgama* (paṭala or chapter):

28. Uttama-daśa-tāla-vidhi.

(There is another Aṁśumad-bheda by Kāśyapa, account of which is given elsewhere.)

II. *Kāmikāgama* (paṭala or chapters):

11. Bhū-parīkshā-vidhi.
12. Praveśa-bali-vidhi.
13. Bhū-parigraha-vidhi.
14. Bhū-karshaṇa-vidhi.
15. Śaṅku-sthāpana-vidhi.
16. Mānopakaraṇa-vidhi.
17. Pāda-vinyāsa.
18. Sūtra-nirmāṇa.
19. Vāstu-deva-bali.
20. Grāmādi-lakshaṇa.
21. Vistārāyāma-lakskaṇa.
22. Āyādi-lakshaṇa.

[1]1. Kāmikāgama.
2. Yogajāgama.
3. Chintyāgama.
4. Kāraṇāgama.
5. Ajitāgama.
6. Diptāgama.
7. Sukshmāgama.
8. Sahasrāgama.
9. Aṁśumānāgama.
10. Suprabhedāgama.
11. Vijayāgama.
12. Niśvāsāgama.
14. Anilāgama.
15. Vīrāgama.
16. Rauravāgama.
17. Makuṭāgama.
18. Vimalāgama.
19. Chandra-jñānāgama.
20. Bimbāgama.
21. Prodgītāgama.
22. Lalitāgama.
23. Siddhāgama, also called Vaikhānasāgama.
24. Sāntvanāgama.
25. Sarvoktāgama.
26. Parmeśvarāgama.
27. Kiraṇāgama.
28. Vātulāgama.

[1](*See Sūkshmāgama*, British Museum, 14033, *aa*, 26.)

24. Daṇḍika-vidhi (dealing with doors and gateways).
25. Vīthi-dvārādi-māna.
26. Grāmādi-devatā-sthāpana.
28. Grāmādi-vinyāsa.
29. Brahma-deva-padāti.
30. Grāmādi-aṅga-sthāna-nirmāṇa.
31. Garbha-nyāsa.
32. Bāla-sthāpana-vidhi.
33. Grāma-gṛiha-vinyāsa.
34. Vāstu-śānti-vidhi.
35. Śālā-lakshaṇa-vidhi.
36. Viśesha-lakskaṇa-vidhi.
37. Dvi-śālā-lakskaṇa-vidhi.
38. Chatuḥ-śālā-lakshaṇa-vidhi.
40. Varta(?dha)māna-śālā-lakshaṇa.
41. Nandyāvarta-vidhi.
42. Svastika-vidhi.
43. Paksha-śālādi-vidhi.
44. (H)asti-śālā-vidhi.
45. Mālikā-lakshaṇa vidhi.
46. Lāṅgala-mālikā-vidhi.
47. Maulika-mālikā-vidhi.
48. Padma-mālikā-vidhi.
49. Nāgarādi-vibheda.
50. Bhūmi-lakba-vidhi.
51. Ādyeskṭakā-vidhāna-vidhi.
52. Upapīṭha-vidhi.
53. Pāda-māna-vidhi.
54. Prastāra-vidhi.
55. Prāsāda-bhūshaṇa-vidhi.
56. Kaṇṭha-lakshaṇa-vidhi.
57. Śikhara-lakshaṇa-vidhi.
58. Stūpika-lakshaṇa-vidhi.
59. Nālādi-sthāpana-vidhi.
60. Eka-bhumyādi-vidhi.
61. Mūrdhni-sthāpana-vidhi.
62. Liṅga-lakshaṇa-vidhi.
63. Aṅkurārpaṇa-vidhi.
64. Liṅga-pratishṭhā-vidhi.
65. Pratimā-lakshaṇa-vidhi.
67. Devatā-sthāpana-vidhi.

68. Pratimā-pratishṭhā-vidhi.
69. Vimāna-sthāpana-vidhi.
70. Maṇḍapa-sthāpana-vidhi.
71. Prākāra-lakskaṇa-vidhi.
72. Parivāra-sthāpana-vidhi.

It should be noticed that out of 75 chapters of the *Kāmikāgama*, more than 60 deal with architecture and sculpture. This Āgama is in fact another *Vāstu-śāstra* under a different name.

III. *Kāraṇāgama* :

Part I (paṭala or chapters) :

3. Vāstu-vinyāsa.
4. Ādyeshṭaka-vidhi.
5. Adhishṭhāna-vidhi.
6. Garbha-nyāsa-vidhi.
7. Prāsāda-lakshaṇa-vidhi.
8. Prākāra-lakshaṇa-vidhi.
9. Liṅga-lakshaṇa.
10. Mūrdhnīshṭakā-lakshaṇa.
11. Pratimā-lakshaṇa.
12. Strī-māna-daśa-tāla-lakshaṇa.
13. Kanishṭha-daśa-tāla-lakshaṇa.
14. Nava-tālottama-lakshaṇa.
16. Bali-karma-vidhi.
19. Mṛit-saṁgrahaṇa-vidhi.
20. Aṅkurārpaṇa-vidhi.
41. Mahābhisheka-vidhi.
56. Vāstu-homa-vidhi.
59. Liṅga-sthāpana-vidhi.
60. Parivāra-sthāpana-vidhi.
61. Bali-pīṭha-pratishṭhā-vidhi.
62. Ratna-liṅga-sthāpana-vidhi.
66. Parivāra-bali.
70. Vimāna-sthāpana-vidhi.
88. Bhakta-sthāpana-vidhi.
138. Mṛit-saṁgrahaṇa (*cf.* 19).

Part II, chapters :

4. Kīla-parīkshā.
5. Gopura-lakskaṇa.
6. Maṇḍapa-lakshaṇa.
7. Pīṭha-lakshaṇa.
8. Śakti-lakskaṇa.

9. Grāma-śānti-vidhi.
10. Vāstu-śānti-vidhi.
11. Mṛit-saṁgrahaṇa.
12. Aṅkurārpaṇa.
13. Bimba-śuddhi.
14. Kautuka-bandhana.
15. Nayanonmīlana.
18. Bimba-śuddhi (*cf.* II. 13).
19. Śayanāropana.
21. Śiva-liṅga-sthāpana.
98. Maṭha-pratishṭhā.

IV. *Vaikhānasāgama* (paṭala or chapters) :

22. Pratimā-lakshaṇa.
43. Uttama-daśa-tāla.

V. *Suprabhedāgama* (paṭala or chapters):

22. Karaṇādhikāra-lakshaṇa, deals with Ushṇīsha (crowns, head-gears), Āsana (chair, seats), Paryaṅka (bedsteads, couches, etc.) Siṁhāsana (thrones), Raṅga (court-yards, theatres), Stambha (columns, pillars), etc.
23. Grāmādi-lakshaṇa-vidhi.
26. Taruṇālaya-vidhi.
27. Prāsāda-vāstu-vidhi.
28. Ādyeshṭakā-vidhi.
29. Garbha-nyāsa-vidhi.
30. Aṅguli-lakshaṇa-vidhi.
31. Prāsāda-lakshaṇa-vidhi.
32. Mūrdhnīshṭaka-vidhi.
33. Liṅga-lakshaṇa.
34. Sakala-lakshaṇa-vidhi.
35. Aṅkurārpaṇa-vidhi.
36. Liṅga-pratishṭhā-vidhi.
37. Sakala(image, idol)-pratishṭhā.
38. Śakti-pratishṭhā-vidhi.
39. Parivāra-vidhi.
40. Vṛishabha-sthāpana-vidhi.

ĀGASTYA-SAKALĀDHIKĀRA (manuscript)—

(Aufrecht, part I, p. 683, *see* Taylor, 1, 72.)

Chapters :

1. Māna-saṁgraha.
2. Uttama-daśa-tāla.
3. Madhyama-daśa-tāla.

4. Adhama-daśa-tāla.
5. Pratimā-lakshaṇa.
6. Vṛishabha-vāhana-lakshaṇa.
7. Naṭeśvara-vidhi.
8. Shoḍaśa-pratimā-lakshaṇa.
9. Dāru-saṁgraha.
10. Mṛit-saṁskāra.
11. Varṇa-saṁskāra.

There are three other MSS. in the Government MSS. Library, Madras, attributed to Agastya. *See Catalogue*, Vol. XXII, nos. 13046, 13047, 13058. Nos. 13046, 13047 are incomplete and deal with astrological matters bearing upon architecture. No. 13058 is a portion of a large manuscript (*see* under ŚILPA-SAṀGRAHA) which is an anonymous compilation. The following chapters of it are ascribed to Agastya :

1. Māna-saṁgraha-viśesha.
2. Uttama-daśa-tāla.
3. Madhyama-daśa-tāla.
4. Somāskanda-lakshaṇa.
5. Chandra-śekhara-lakshaṇa.
6. Vṛisha-vāhana-lakshaṇa.

It is not quite clear whether the following 7–14 (which are not numbered as such in the compilation) should be attributed to Agastya :

7. Tripurāntaka-lakshaṇa.
8. Kalyāṇa-sundara-lakshaṇa.
9. Ardha-nārīśvara-lakshaṇa.
10. Pāśupata-lakshaṇa.
11. Bhikshāṭana-lakshaṇa.
12. Chaṇḍeśānugraha-lakshaṇa.
13. Dakshiṇā-mūrti-lakshaṇa.
14. Kāla-dahana-lakshaṇa.

15–18. Apparently missing.

19. Pratimā-lakshaṇa.

The following found in another portion of the compilation are indifferently numbered as shown on the right parallel column :

20. (3) Upapīṭha-vidhāna.
21. (9) Śūla-māna-vidhāna.
22. (10) Rajju-bandha-saṁskāra-vidhi.
23. (11) Varṇa-saṁskāra.
24. (21) Akshi-mokshaṇa.

ĀGĀRA-VINODA—On the construction of houses.

(Aufrecht. *ibid.*, part 1, p. 2.)

ĀYA-TATTVA—by Maṇḍana Sūtradhāra.

(*See Vāstu-śāstra*, by Rājavallabha Maṇḍaṇa.)

ĀYĀDI-LAKSHAṆA—On architectural and sculptural measurement.

(Aufrecht, part 1, 62.)

ĀRĀMĀDI-PRATISHṬHĀ-PADDHATI—On the construction of gardens, etc.

(Aufrecht, part 1, p. 53.)

K

KĀMIKĀGAMA—*See* under Āgamas.

KARAṆĀGAMA—*See* under Āgamas.

KĀŚYAPĪYA—(Manuscript), deals with architecture and cognate arts. (Govt. MSS. Library, Madras, *Catalogue of MSS.*, Vol. xxii, p. 8755, f., nos. 13032, 13033. *See* also Oppert's *List of Sanskrit MSS. in Private Libraries of South India*, Vol. ii, p. 395, no. 6336.)

'This work has attained universal authority amongst all the sculptors of South India up to the present time, and the young pupils are even now taught to learn by heart the verses given in this book regarding the rules of constructions and measurements of images.'[1] Kāśyapa is said to have learnt this science from Śiva (paṭala 1, verses 1–5).

The contents are divided into eighty-three paṭalas which are classified in an overlapping manner into the following headings :

1. Karshaṇa.
2. Prāsāda-vāstu.
3. Vāstu-homa.
4. Prathameshṭaka-vidhi.
5. Upapīṭha-vidhāna.
6. Adhishṭhāna-vidhi.
7. Nāla-lakshaṇa.
8. Stambha-lakshaṇa.
9. Phalaka-lakshaṇa.
10. Vedika-lakshaṇa.
11. Jālaka-lakshaṇa.
12. Ta(o)raṇa-lakshaṇa.
13. Vṛitta-sphuṭita-lakshaṇa.
14. Stambha-toraṇa-vidhi.

[1] *South Indian Bronzes*, by Gangooli.

15. Kumbha-tala-lakshaṇa.
16. Vṛitta-sphuṭita-lakshaṇa, *cf.* 13.
17. Dvāra-lakshaṇa.
18. Kampa-dvāra-lakshaṇa.
19. Prastara-lakshaṇa.
20. Gala-vidhāna.
21. Śikhara-lakshaṇa.
22. Nāsikā-lakshaṇa.
23. Mānopakaraṇa.
24. Māna-sūtrādi-lakshaṇa.
25. Nāgarādi-vidhi.
26. Garbha-nyāsa-vidhi.
27. Eka-tala-vidhāna.
28–40. Dvi-trayodaśa-tala-vidhāna.
41. Shoḍaśa-bhūmi-vidhāna.
42. Mūrdhanīshṭaka-vidhāna.
43. Prākāra-lakshaṇa.
44. Manṭa(-ḍa)pa-lakshaṇa.
45. Gopura-lakshaṇa.
46. Sapta-mātṛika-lakshaṇa.
47. Vināyaka-lakshaṇa.
48. Parivāra-vidhi.
49. Liṅga-lakshaṇoddhāra.
50. Uttama-daśa-tāla-purusha-māna.
51. Madhyama-daśa-tāla-purusha-māna.
52. Uttama-nava-tāla.
53. Madhyama-nava-tāla.
54. Adhama-nava-tāla.
55. Ashṭa-tāla.
56. Sapta-tāla.
57. Pīṭha-lakshaṇoddhāra.
58. Sakala-sthāpana-vidhi.
59–60. Sukhāsana.
61. Chandra-śekhara-mūrti-lakshaṇa.
62. Vṛisha-vāhana-mūrti-lakshaṇa.
63. Nṛitta-mūrti-lakshaṇa.
64. Gaṅgādhara-mūrti-lakshaṇa.
65. Tri-pura-mūrti-lakshaṇa.
66. Kalyāṇa-sundara-lakshaṇa.
67. Ardha-nārīśvara-lakshaṇa.
68. Gajaha-mūrti-lakshaṇa.

69. Paśupati-mūrti-lakshaṇa.
70. Kaṅkāla-mūrti-lakshaṇa.
71. Hary-ardha-hara-lakshaṇa.
72. Bhikshāṭana-mūrti-lakshaṇa.
73. Chaṇḍeśānugraha.
74. Dakshiṇā-mūrti-lakshaṇa.
75. Kālaha-mūrti-lakshaṇa.
76. Liṅgodbhava-lakshaṇa.
77. Vṛiksha-saṁgrahaṇa.
78. Śūla-lakshaṇa.
79. Śūla-pāṇi-lakshaṇa.
80. Rajju-bandha-lakshaṇa.
81. Mṛit-saṁskāra-lakshaṇa.
82. Kalka-saṁskāra-lakshaṇa.
83. Varṇa-saṁskāra-lakshaṇa.
84. Varṇa-lepana-medhya-lakshaṇa.
85. Grāmādi-lakshaṇa.
86. Grāma-lakshaṇa.

KUPĀDI-JALA-STHĀNA-LAKSHAṆA—On the construction of wells, etc.

(In possession of the Mahārājā of Travancore; Oppert's *List of Sanskrit MSS. in Private Libraries of South India*, Vol. I, p. 467.)

KAUTUKA-LAKSHAṆA—On architecture.

(Oppert's *List of Sanskrit MSS., ibid.*, Vol. II, p. 258.)

KRIYĀ-SAṀGRAHA-PAÑJIKĀ—A catalogue of rituals by Kuladatta. It contains among other things instructions for the selection of site for the construction of a Nihāra and also rules for building a dwelling house.

(*The Sanskrit and Buddhist Literature of Nepal*, by Rajendra Lal Mitra, 1882, p. 105.)

KSHĪRĀRṆAVA—Attributed to Viśvakarman, on architecture, etc.

(Aufrecht, *ibid.*, part II, pp. 26, 138.)

KSHETRA-NIRMĀṆA-VIDHI—On the preparation of ground with a view to construction of buildings thereupon.

(In possession of the Rājā of Cochin; Oppert's *List of Sanskrit MSS. in Private Libraries of South India*, Vol. I, p. 354.)

G

GARUḌA-PURĀṆA—*See* under PURĀṆAS.

GĀRGYA-SAṀHITĀ—(MSS. R. 15. 96, in Trinity College, Cambridge; it contains 108 leaves, in oblong folio; Indian paper; Devanāgarī character; copied in 1814). It deals with the following architectural subjects :

Dvāra-nirdeśa । (fol. 51*a*, chap. 3).
Dvāra-pramāṇa-vidhi । (fol. 57*b*).
Gārgīyāyāṁ vāstu-vidyāyāṁ chatuḥ-śāla-dvi-tri-śālaika-śāla-vidhi । (fol. 58*a*).
Vāstu-vidyāyāṁ chatur-bhāga-tri-bhāga-prati-bhāga, etc. (fol. 60*a*).
Dvāra-stambhochchrāya-vidhi. । (fol. 60*b*).
Vāstu-vīdyāyāṁ prathamo'dyāyaḥ । (fol. 67*a*).
„ „ dvitīyo'dhyāyaḥ । (fol. 67*b*).
„ „ dvāra-pramāṇa nirdeśam । (fol. 68*a*).
Gṛiha-praveśam । (fol. 68*b*).

GṚIHA-NIRŪPAṆA-SAṀKSHEPA—A summary-work on house-building.

(Aufrecht, *ibid.*, part 1, p. 157.)

GṚIHA-NIRMĀṆA-VIDHI—On rules for the erection of houses, temples, and other edifices.

(Wilson's *Mackenzie Collection*, p. 304.)

GṚIHA-PĪṬHIKĀ—On the construction of houses.

(Oppert's *List of Sanskrit MSS. in Private Libraries of South India*, Vol. 1, p. 545.)

GṚIHA-VĀSTU-PRADĪPA—(Lucknow, 1901)—Contains 87 pages deals mostly with astronomical and ritualistic matters in connection with the building of houses.

GṚIHĀRAMBHA—by Śrīpati.

(*Cf. Vāstu-sārani.*)

GOPURA-VIMĀNĀDI-LAKSHAṆA—On gate-houses and temples, etc.

(Oppert's *List of Sanskrit MSS.*, *ibid.*, Vol. II, p. 259, no. 4009.)

GRĀMA-NIRṆAYA—by Nārāyaṇa.

(*Cf. Vāstu-sāraṇi.*)

GH

GHAṬṬOTSARGA-SŪCHANIKĀ—On the erection of steps on the bank of a river.

(Aufrecht, *ibid.*, part III, p. 37.)

CH

CHAKRA-ŚĀSTRA—On architecture and cognate arts.

(Oppert's *List of Sanskrit MSS.*, *ibid.*, Vol. II, p. 200.)

CHITRA-KARMA-ŚILPA-ŚĀSTRA—On painting.

(Aufrecht, *ibid.*, part I, p. 187.)

CHITRA-PAṬA—On painting.

(Oppert's *List of Sanskrit MSS.*, *ibid.*, Vol. I, p. 440.)

CHITRA-LAKSHAṆA—(ed. Laufer)—Treats largely with the sculptural measurement of images and painting; translated into German from Tibetan, the original Sanskrit version is apparently missing.

CHITRA-SŪTRA—On painting (mentioned in Kaṭṭani-mata, 22).

(Aufrecht, *ibid.*, part I, p. 187.)

J

JAYA-MĀDHAVA-MĀNASOLLĀSA—Attributed to one Jayasiṁhadeva—On architecture.

(Aufrecht, *ibid.*, part I, p. 201.)

JĀLĀRGALA—Attributed to Varāhamihira—On door-bars and latticed windows.

(Oppert's *List of Sanskrit MSS.*, *ibid.*, Vol. II, no. 3146, p. 217.)

JALĀRGALA-YANTRA—On the architectural instruments and machines.

(Oppert's *List of Sanskrit MSS.*, *ibid.*, Vol. II, no. 3147, p. 217.)

JÑĀNA-RATNA-KOSHA—Attributed to Viśvakarman—On architecture.

(Aufrecht, part I, p. 210, in possession of Acharatalal Vaidya, Ahmedabad, *Catalogue of Sanskrit MSS. contained in the Private Libraries of Gujarat*, etc. 1872, p. 276.)

T

TACHCHU-ŚĀSTRA—Same as Manushyālaya-chandrikā (*see* below).

TĀRĀ-LAKSHAṆA—On sculpture (image of the goddess Tārā).

(Aufrecht, part 1, p. 229.)

D

DAŚA-TĀLA-NYAGRODHA-PARIMAṆḌALA-BUDDHA-PRATIMĀ-LAKSHAṆA—On the ten-tāla measure of Buddha images, exists in Tibetan translation ; the original Sanskrit version is apparently missing.

DAŚĀ-PRAKĀRA—Attributed to Vasishṭha—On architectural defects.

(*See Vāstu-sāraṇi*, by Maṭri-prasāda-Pande, Benares, 1909.)

DIK-SĀDHANA—Attributed to Bhāskara—On architecture.

(*See Vāstu-sāraṇi.*)

DĪRGHA-VISTĀRA-PRAKĀRA—Attributed to Nārada—On architectural measurement.

(*See Vāstu-sāraṇi.*)

DEVATĀ-ŚILPA—On sculpture, dealing specially with the images of deities.

(A classified catalogue of Sanskrit works in the Sarasvatī Bhāṇḍāram Library of His Highness the Mahārājā of Mysore, class XIX, no. 535.)

DEVĀLAYA-LAKSHAṆA—On the construction of temples.

(Oppert's *List of Sanskrit MSS. in Private Libraries of South India*, Vol. 1, p. 470.)

DVĀRA-LAKSHAṆA-PAṬALA—On the construction of doors.

(*Ibid.*, no. 6003, p. 470.)

DH

DHRUVĀDI-SHOḌAŚA-GEHĀNI—Attributed to Gaṇapati—On the architectural arrangement of buildings.

(*See Vāstu-sāraṇi.*)

N

NĀRADA-PURĀṆA—*See* under PURĀṆAS.

NĀRADA-SAṀHITĀ—deals with the following subjects :

(1) Sura-pratishṭhā (20 verses).

(2) Vāstu-vidhāna (62 verses, describing briefly Bhūparīksha, Dvāra-sthāna, Śaṅku-sthāpana, Pada-nyāsa, and Gṛiha-nyāsa).

(3) Vāstu-lakshaṇa—describes ceremonies of Gṛiha-praveśa.

NĀVĀ-ŚĀSTRA—'On ship-building and navigation.' But the work is chiefly astrological. Some directions are, however, given respecting the materials and dimensions of vessels.

(Taylor's *Catalogue Raisonée*, Vol. III, p. 6.)

In Taylor's *Catalogue Raisonée*, there is mentioned another Manuscript of which the title is lost. It is 'on the art of constructing forts, houses, fanes, of settling a village ; navigation and variety of other similar things enumerated as taught in 36 works, the names of which are given.' (*Ibid.*, Vol. III, p. 350.)

P

PAKSHI-MANUSHYĀLAYA-LAKSHAṆA—On the construction of human dwellings and aviaries.

(Oppert's *List of Sanskrit MSS.*, *ibid.*, Vol. I, p. 471.)

PAÑCHA-RĀTRA-(PRA)DĪPIKĀ—(also called Mantra-dīpikā)—It professes to form a part of the Padma-tantra of the Nārada-Pañcha-rātra. It has a Telugu commentary by Peḍḍanāchārya. It deals with images and consists of the following five chapters :

1. Śilā-saṁgraha-lakshaṇa.
2. Dāru-saṁgrahaṇa.
3. Pratimā-lakshaṇa.
4. . . . nāma-tṛitīyo'dhyāya.
5. Pratimā-saṁgrahe jalādhivāsana-ashṭamo'dhyāya.

(*See Egg. MSS.*, 3150, 2579, II, *Mackenzie Collection.*)

PIṆḌA-PRAKĀRA—Attributed to Gopirāja—On architectural subjects.

(*See Vāstu-sāraṇi.*)

PĪṬHA-LAKSHAṆA—On pedestals.

(Oppert's *List of Sanskrit MSS.*, *ibid.*, Vol. I, p. 472.)

PURĀṆAS—(Bombay editions)—Of the 18 or 19 Mahā-purāṇas,[1] the following have special reference to Architecture and Sculpture :

I. *Agni-Purāṇa :*

Chapters :

42. Prāsāda-lakshaṇa-kathana.
43. Prāsāda-devatā-sthāpana.
44. Vāsudevādi-pratimā-lakshaṇa-vidhi.
45. Piṇḍikā-lakskaṇa.
46. Śālagrāmādi-mūrti-lakshaṇa-kathana.
49. Matsyādi-daśāvatāra-kathana.
50. Devī-pratimā-lakshaṇa-kathana.
51. Sūryādi-pratimā-lakshaṇa.
52. Devī-pratimā-lakshaṇa (*cf.* 50).
53. Liṅga-lakshaṇa.
54. Liṅga-mānādi-kathana.
55. Piṇḍikā-lakshaṇa-kathana (*cf.* 45).
60. Vāsudeva-pratishṭhā-vidhi (*cf.* 44).
62. Lakshmī-pratishṭhā-vidhi.
104. Prāsāda-lakshaṇa (*cf.* 42).
105. Gṛihādi-vāstu-kathana.
106. Nāgarādi-vāstu.

II. *Garuḍa-Purāṇa :*

Chapters :

45. Śālagrāma-mūrti-lakshaṇa.
46. Prāsāda-ārāma-durga-devālaya-maṭhādi-vāstu-māna-lakshaṇa-nirūpaṇa.
47. Prāsāda-liṅga-maṇḍapādi-śubhāśubha-lakshaṇa-nirūpaṇa.
48. Devānāṁ pratishṭhā-vidhi.

III. *Nārada-Purāṇa :*

Part I, chapter :

13. Devatāyana-vāpi-kūpa-taḍāgādi-nirmāṇa.

IV. *Brahmāṇḍa-Purāṇa :*

Chapter :

7. *Gṛihādi-nirmāṇa.*

[1] 1. Brahma.
2. Padma.
3. Vishṇu.
4. Śiva.
5. Bhāgavata.
6. Nārada.
7. Mārkaṇḍeya.
8. Agni.
9. Bhavishya.
10. Brahma-vaivarta.
11. Liṅga.
12. Varāha.
13. Skanda (also called Kumāra).
14. Vāmana.
15. Matsya.
16. Garuḍa.
17. Brahmāṇḍa.
18. Vāyu.
19. Kūrma.

V. *Bhavishya-Purāṇa :*

Chapters :

12. Madhya-parvaṇi, Pratidevatā-pratimā-lakshaṇa-varṇana.

130. Brahma-parvaṇi, Prāsāda-lakshaṇa-varṇana.

131. Mūṛti-sthāna, deals with the materials, etc., of which images are made.

132. Pratimā-māna, deals with the measurement of images.

VI. *Matsya-Purāṇa :*

Chapters :

252. Deals with the introduction of eighteen ancient architects—Bhṛigu, Atri, Vasisṭha, Viśvakarmā, Maya, Nārada, Nagnajit, Viśālāksha, Purandara, Brahma, Kumāra, Nandīśa, Śaunaka, Garga, Vāsudeva, Aniruddha, Śukra, and Bṛihaspati.

255. Stambha-māna-vinirṇaya.

257. Dārvāharaṇa.

258. Nava-tāla-māna.

262. Pīṭhikā-lakshaṇa.

263. Liṅga-lakshaṇa.

269. Prāsāda-varṇana.

270. Maṇḍapa-lakshaṇa.

VII. *Liṅga-Purāṇa :*

Part II, chapter :

48. Yāga-kuṇḍa-vinyāsa-kathana-pūrvakaṁ sarvāsāṁ devatānāṁ sthāpana-vidhi-nirūpaṇam, Prāsādārchāni-nirūpaṇam.

VIII. *Vāyu-Purāṇa :*

Part I, Chapter :

39. Śaila-sthita-vividha-devālaya-kīrtana.

IX. *Skanda-Purāṇa :*

Chapters :

24. Māheśvara-khaṇḍe-prathame—Himālaycna sva-sutāyā vivāhārthaṁ Gargāchārya-purohitaṁ puraskṛitya Viśvakarma-dvārā pūrva-maṇḍapa-nirmāṇādi-varnanam, Nāradād Viśvakarma-kṛita-vīvāha-maṇḍapaṁ chāturyeṇa sarva-deva-pratikṛiti-chitra-vinyāsaṁ śrutvā sarveshāṁ devānāṁ śaṅkā-prāptih.

Māheśvara-khande dvitīye—svayaṁ Viśvakarma-dvāra-nirmāpite Mahīnagare sthāpana-varṇana.

25. Vaishṇava-khaṇḍe dvitīye—Nārada-likhita-sāhitya-sambhāva-saṁgraha-patraṁ śrutvā Indradumnājñayā Padmanidhinā svarṇa-śālā-nirmāṇaṁ, Nāradājñayā Viśvakarmaṇā syandana-traya-nirmāṇaṁ, tasya rathasya Nārada-kareṇa sthāpanaṁ, tat-prasaṁgena ratha-sthāpana-prakāra-vidhi-varṇanam.

PRATIMĀ-DRAVYĀDI-VACHANA—On the materials of which idols are made.

(Oppert's *List of Sanskrit MSS., ibid.*, Vol. I, p. 490.)

PRATIMĀ-MĀNA-LAKSHAṆA—On the tāla-measures of images, exists in Tibetan Translation ; Sylvian Levi reports that he has traced its original Sanskrit version in the Palace Library of Tibet.

PRATISHṬHĀ-TATTVA—Also called MAYA-SAṀGRAHA—On architecture.

(Aufrecht, *ibid.*, part III, p. 74.)

PRATISHṬHĀ-TANTRA—On architecture in a dialogue form between Śiva and Pārvatī.

(Aufrecht, *ibid.*, part III, p. 74.)

PRĀSĀDA-KALPA—On the construction of buildings.

(Oppert's *List of Sanskrit MSS., ibid.*, Vol. II, p. 522.

PRĀSĀDA-KĪRTANA—On architecture.

(Author not known ; in possession of Gopal Rao, Mālegamva, *Catalogue of Sanskrit MSS. in Private Libraries of Gujarat*, etc., 1872, p. 276.)

PRĀSĀDA-DĪPIKĀ—On architecture, quoted in Madana-Pārijāta

(Aufrecht, *ibid.*, part I, p. 364.)

PRĀSĀDA-MAṆḌANA-VĀSTU-ŚĀSTRA—Attributed to Sūtra-dhāra Maṇḍana—(*Egg. MSS.* 3147, 2253). It is written in Sanskrit, but is largely mixed with Bhāshā forms. It contains the following eight chapters :

1. Miśra-kalaśa.
2. Jagati-dṛishśi-dosho āyatanādhikāra.
3. Bhitti-pīṭha-maṇḍovāra-garbha-gṛihaudumbara-pramāṇa.
4. Pramāṇa-dṛishṭi-pada-sthāna-śikhara-kalaśa-lakshaṇa.
5. Rājyādi-prāsādādhikāra.
6. Keśaryādi-prāsāda-jāti-lakshaṇa, pañcha-kshetra-pañcha-chatvāriṁśan-meru-lakshaṇādhyāya.
7. Maṇḍapa-bālānaka-sambaraṇādhikāra.
8. Jīrṇoddhāra-bhinna-dosha-sthāvara-pratishṭhā, Sūtra-dhāra-pūjā, Jina-pratishṭhā, Vāstu-purusha-vinyāsa.

PRĀSĀDA-LAKSHAṆA—Attributed to Varāhamihira—On architecture.

(Oppert's *List of Sanskrit MSS., ibid.*, Vol. II, p. 208.)

PRĀSĀDA-LAKSHAṆA—On buildings.

(Oppert's *List of Sanskrit MSS., ibid.*, Vol. I, p. 473.)

PRĀSĀDĀLAṄKĀRA-LAKSHAṆA—On the decoration (articles of furniture) of buildings.

(In possession of the Mahārājā of Travancore ; Oppert's *List of Sanskrit MSS., ibid.*, Vol. II, p. 473.)

B

BIMBAMĀNA—(MSS. British Museum, nos. I. 559, 5291, foll. 33, 7 lines to a page ; II, 558, 5292, foll. 27, 9 lines to a page ; written in Siṁhalese character, has a Siṁhalese commentary)—This is a treatise on religious sculpture, stated to be extracted from a Gautamīya ascribed to Sāriputra. The last colophon runs thus : Iti Gautamīye Sāri-putrā-śrute Bimba-mānam samāptam. The commentator explains this Bimbamāna-vidhi as the Sarvajña-pratimā-pramāṇa-vidhi.

BṚIHAT-SAṂHITĀ—Of Varāhamihira—On architectural and sculptural matters.

Chapters :

53. Vāstu-vidyā.
56. Prāsāda-lakshaṇa.
57. Vajra-lepa.
58. Pratimā-lakshaṇa.
79. Śayyāsana-lakshaṇa.

BUDDHA-PRATIMĀ-LAKSHAṆA—On the tāla measure of Buddha-images ; exists in Tibetan Translation ; the original Sanskrit version is apparently missing.

BUDDHA-LAKSHAṆA—in Siamese, dealing with 'the more orthodox peculiarities of the characteristics of the body.' (M. G. Coede, G. E. F. E. 1915), King Phra Nangklao thought of it as 'a work of merit to shorten the fingers of the statue of Sakyamuni' in Waṭ (temple) Sudas at Bangkok (capital of Siam). 'A paper about the attitudes of Buddha images in the Siamese monasteries was written by the Somtej Phra Paramanujit, the son of the King Phra Buddha Yot Fa (died in A.D. 1854).'

BRAHMĀṆḌA-PURĀṆA—*See* under PURĀṆAS.

BH

BHAVISHYA-PURĀṆA—*See* under PURĀṆAS.

M

MAṬHA-PRATISHṬHĀ-TATTVA—Attributed to Raghunandana —Contains quotations from the *Devī-purāṇa* and the *Deva-pratishṭhā-tattva*, both of which deal with architectural and sculptura matters.

MATSYA-PURĀṆA—*See* under PURĀṆAS.

MANUSHYĀLAYA-CHANDRIKA—(Also called TACHCHU-ŚĀSTRA) —deals with measurement, etc., concerning private dwelling houses as distinguished from religious temples, and military forts, etc. It contains 65 stanzas and a Malayalam translation. There is a manuscript also bearing the same title.

(Oppert's *List of Sanskrit MSS., ibid*, Vol. I, p. 475.)

MANUSHYĀLAYA-LAKSHAṆA—On the building of human dwellings.

(In possession of the Mahārājā of Travancore; Oppert's *List of Sanskrit MSS., ibid*, Vol. I, p. 475.)

MAÑJU-ŚRI-MŪLA-KALPA—A *Tantra* work (*cf.* Trivandrum Sanskrit Series), translated in Tibetan, deals with some architectural matters.

MANTRA-DĪPIKĀ (*see* PAÑCHA-RĀTRA-PRADĪPIKĀ)—On architecture.

MAYAMATA—An oft quoted and well-known authority on architecture. There are several treatises attributed to Maya :

I. *Mayamata*, edited by Gaṇapati Śāstri, 1919, from three fragmentary and one incomplete (with a Tamil translation) manuscripts; it contains 34 chapters, and four more chapters are missing (*see* below).

There are some other manuscripts bearing the same title (*Egg.* 3150, 2575); one of them (in the Oriental Manuscripts Library, Madras), written in modern Telugu, on rough paper, contains five chapters with a short commentary by Gannamāchārya.

II. *Mayamata-Śilpa-śāstra-vidhāna* (*Egg.* 3150, 2575, 3151, 2630, with Gannamācharya's Telugu commentary as noted above).

III. *Maya-Śilpa-śatika* (another manuscript).

IV. *Maya-Śilpa*, a few extracts from this have been translated into English by Rev. J. E. Kearns (*see Indian Ant.*, Vol. v, pp. 230, 293).

There is also another English translation of *Mayamata* in the *Mackenzie Collection* (Translation, class x, Sanskrit, 2–6).

V. *Maya-vāstu*—text, pp. 33, published by Rāma Svami Sāstralu & Sons, Madras, 1916.

VI. *Maya-vāstu-śāstram*—text, pp. 40, published by K. Lakshman Mudali, Madras, 1917.

VII. A Sinhalese version of *Māyāmataya* manuscripts is referred to by A. K. Coomarswamy (*Mediaeval Simhalese Art.*, pp. 124–128). It also deals with a few architectural objects and is meant for 'learned and skilful architects.'

VIII. *Mayamata-vāstu-śāstra*—Oriental Manuscripts Library, Madras, *Catalogue*, Vol. xxii, nos. 13034 (with a Tamil commentary), 13035 (with a Telugu commentary), 13036, 13037, 13038, 13039 (with a Telugu commentary).

Of these manuscripts no. 13034 is the largest, containing 390 pages of $13\frac{1}{4}'' \times 8''$ paper of 22 lines to a page. The subjects and the method of description are strikingly similar to those of the *Mānasāra*. It is divided into the following 36 chapters :

1. Saṁgrahādhyāya.
2. Vāstu-prakāra.
3. Bhū-parīkshā.
4. Bhū-parigraha.
5. Mānopakaraṇa.
6. Dik-parichchhedana.
7. Pada-devatā-vinyāsa.
8. Deva-bali-karma-vidhāna (incomeplete).
9. Grāma-garbha-vinyāsa (incomplete).
10. Nagara-vinyāsa.
11. Bhū-lamb(h)a-vidhāna.
12. Garbha-nyāsa-vidhāna.
13. Upapīṭha-vidhāna.
14. Adhiṣṭhāna-vidhāna.
15. Pāda-pramāṇa-dravya-parigraha.
16. Prastara-karaṇa.
17. Sandhi-karma-vidhāna.
18. Śkhara-karaṇa-bhavana-samāpti-vidhāna.
19. Eka-bhūmi-vidhāna.
20. Dvi-bhūmi-vidhāna.
21. Tri-bhūmi-vidhāna.
22. Bahu-bhūmi-vidhāna.
23. Prākāra-parivāra (elsewhere, Sandhi-karma-vidhāna).
24. Gopura-vidhāna.
25. Sabhā(maṇḍapa)-vidhāna.
26. Śālā-vidhāna.

27. Gṛiha-mānādhikāra (elsewhere Chatur-gṛiha-vidhāna).
28. Gṛiha-praveśa.
29. Rāja-veśma-vidhāna.
30. Dvāra-vidhāna.
31. Yānādhikāra.
32. Yāna-śayanādhikāra.
33. Liṅga-lakshaṇa.
34. Pīṭha-lakshaṇa (incomplete).
35. Anukarma-vidhāna.
36. Pratimā-lakshaṇa.

Compare no. I, which contains the first 34 out of 36 chapters given in the above list, the variations are noted within brackets.

No. 13035 contains in 74 pages the chapters 1–32.

No. 13036 is same as no. 13035.

No. 13037 contains only two incomplete chapters in six pages.

No. 13038 contains in 94 pages the following twelve chapters :

1. Pratimā-vidhāna.
2. Āya-lakshaṇa.
3. Liṅga-lakshaṇa.
4. Daśa-tāla-vidhāna.
5. Kuñchita-vidhāna.
6. Nava-tāla-vidhāna.
7. Hasta-karma-vidhāna.
8. Upapīṭha-vidhāna.
9. Eka-bhūmi-vidhāna.
10. Dvi-tāla-vidhāna.
11. Tri-tāla-vidhāna.
12. Gopura-vidhāna.

Its colophon runs thus—' iti Gannāchārya-virachitāyāṁ Mayamate Śilpa-śāstre . . . '

No. 13039 contains in 36 pages the first four chapters of no. 13038. ' There is in Tamil a treatise on *Śilpa-śastra*, said to have been originally composed in Sanskrit by Myen (i.e., Maya) who, according to mythology, was a son of Brahma and architect of the gods. The original work appears to have been disseminated far and wide, and to have suffered by omissions as well as by additions. The work under consideration seems to have been formed from selections of existing editions of the original work under the superintendence and guidance of persons having a practical knowledge of *Śilpa-śastra* or at least of persons professing to have such knowledge.

(*Ind. Ant.*, Vol. v., p. 230, c. 1, para. 1 ; *see also M.*, II, 11–12, 17–20, under STHAPATI.)

In regard to Maya the following note is of great interest :

'That the Maya culture of Central America was derived from Asia is demonstrated by Mr. J. Leslie Mitchell in his book *The Conquest of the Maya*. In reviewing the publication Mr. H. J. Massingham writes that the evidence for a succession of cultural waves from Asia is so overwhelming that " the impartial reader must wonder why the issue was ever a controversial one." It appears that it was India which contributed most to the development of Maya culture. Among the Maya sculptures are to be found representations of Hanuman, of Ganeśa, and of Indra and the pictorial and ritualistic reminiscences of Buddhism. "All this suggests," says Mr. Massingham, " that the ancient mariners reached the American coast from A. D. 700 onwards not once but many times." The Hindu culture could not have been transported to Central America unless the Hindus had been a great sea-faring people.'

Exploration of the sites of a lost civilization is the fascinating pursuit of Dr. Gann, who has discovered a hitherto unknown monolith and a once-populous site in the forests of Yucatan. He is exploring for traces of the Mayas, and his progress is recorded in a series of articles published in the *Morning Post* :

' I discovered the ruins of the great city of Coba,' he writes, ' through information found in a recent translation of the ancient Maya manuscript book of Chilan Balam of Chumayel. This describes the migration of the Itzas from Chichenitza to Coba, which is about fifty miles to the east of Chichenitza.

' The books of Chilan Balam are the old traditions of the Mayas, which survived the Spanish conquest of Yucatan. They record the migrations of Maya clans, and were reduced to writing in the sixteenth century. I was informed by a wandering Maya Indian that in the Mexican territory of Quintana Roo he had come across a great slab of stones lying buried in the bush upon which were inscribed : "Ubalob uxben uincoob," or things belonging to the ancient people. He said he had found it not many miles north of the British Honduras frontier.

' As guide I took the Indian who had told me of the stone. He, like most of his race, had nothing to say to strangers, and he said it most efficiently.

' I had no difficulty in obtaining my permit to visit the shores of Chetumal Bay, where the Maya monolith was reported to be.

' So we set out on our journey up the Bay, which runs almost due north for about thirty miles into the south of the Yucatan Peninsula. This is surely one of the most desolate stretches of water in the world. It is shallow, yellow, forbidding. On the east separating it from the Caribbean Sea, is an unexplored, uninhabited peninsula, covered with virgin bush.

On the west, between the Bay and the great Bacalar Lagoon, the land is equally desolate, being traversed at rare intervals only by a few Indian Chicle bleeders, who roam in search of the sapodilla trees, from which they get the latex that forms the raw material of chewing gum.

'About thirteen miles from Payo Obispo I lighted on my great find We came to a spot on the west coast of the bay where an Indian had cut down the bush to make a small maize plantation. My Indian guide directed us to land here, and then led us to the stone we were seeking.

'The full importance of the discovery was not apparent at first. It was a block of greyish schist, twelve feet long, eighteen inches wide, and twelve inches thick. It had at one time stood upright, but now lay flat and embedded in the ground. Upon one edge faint traces of sculpture were visible, but the greater part of the exposed surfaces had been worn quite smooth by the tropical downpours of an unknown number of rainy seasons. This has been the fate of many Maya inscriptions.

'I then brushed the soil from the stone, and there—glorious surprise—I saw the Maya Initial Series Date—9. 8. 0. 0. 0. 5 Aban 3 Chen. or 26 October, A. D. 333! The sculpture preserved by its burial in the earth, was almost as clear and plain as on the day when it was cut in the stone, nearly sixteen centuries ago.

'Amid all the Maya ruins in Yucatan only four such Initial Series dates have been found, and the date carved on the monolith which lay before me was more than three hundred years earlier than that appearing on the oldest of the stelae previously found. Now, one of the most baffling mysteries connected with the Mayas is their abandonment of their old empire and foundation of the new one; for, at a certain period in their history, they left their cities, built with an enormous expenditure of labour, and migrated from the fertile lands in which they stood to found new settlements in what were, apparently, uninhabited regions.

'Earthquakes, pestilence, and foreign invasion have been suggested as possible causes of this migration. The cities the Mayas left bear no traces of violence having been wrought by man or the forces of Nature, and the buildings of their new settlements were obviously erected by a people with unimpaired vigour. It is therefore important to fix the date when they first established themselves in Yucatan; and this discovery may, in fact, cause a complete reversion of the ideas generally held as to their first immigration into this peninsula and their foundation of what is known as the New Empire. It may, indeed, affect our views of the whole history of the earliest and most advanced aboriginal civilization of America, which was in many respects the highest civilization of ancient, if not of any time.

'The carving on this stela begins with the initial glyph and in column below this come the glyphs meaning—

9 Bactuns (periods of 400 years, each of 360 days).
8 Katuns (periods of twenty years), O Tuns (years).
o Unials (Maya months of twenty days).
o Kins (days). It thus records the lapse of 3,760 years from the beginning of the Maya chronology. The Mayas did not count any period of time until it was completed, that is to say, their sign for the first day of a month was o. So if written in our style these glyphs would read 1. 1. 3761.

'It is generally assumed that the date from which the Mayas reckoned their chronology is mythological rather than historical. But for the present purposes consideration of such a question is immaterial. The point is that all the dates on such monoliths are reckoned from the same day, and therefore, according to Spinden's correlation of their system with ours, this date corresponds to our 26 October, A.D. 333.

'This would, apparently, place the beginning of the Maya chronology in 3381. The British Museum Guide to the Maudsley collection of Maya Sculptures gives this Maya date 9. 8. o. o. o. 5 Ahan, 3 Chen as A.D. 64. But it mentions that Professor Morley has worked out another correlation which places this and all other Maya dates some 270 years later.

'Beneath this date on the stela was a great sheet of hieroglyphics, which were perfectly clearly defined, but they are in our present state of knowledge indecipherable. I have no doubt though that if we could read them we should find that they recorded events which had occurred during the preceding Katun or period of twenty Maya years, as such stelae were put up by the Mayas to commemorate the ends of each of those periods.

'The monolith had been erected just in front of a great terraced pyramid which stood between two others. All these pyramids were faced, in the usual Maya style, with blocks of cut limestone. The central one had three terraces and was 32 feet high. Its flat top, upon which there no doubt stood a wooden temple, long since perished, was 135 feet long and 64 feet across.

'Further investigation showed that these pyramids were at one end of a great enclosure, which was surrounded by a massive stone wall. This wall is from 12 to 15 feet thick at the base, and in the places where it has remained intact, it is 12 feet high; but for the most part the growth of luxurious vegetation has thrown the stones down and the ruins are only 3 or 4 feet above ground. The wall is a mile and a half long and forms a semi-circle with the two ends running down to the shore.

'I think there can hardly be any doubt that this was intended as a fortification, and therefore a particular interest is attached to it. For, judging by all their sculptures, the ancient Mayas knew nothing of war. Their sculptors have left no records of battles or triumphs, such as those of Greece, Egypt, or Babylon. One assumed that all the Maya clans dwelt in amity and that until quite late in their history they had no experiene of fighting, either among themselves or with alien races.

'Yet here we have what is obviously a defensive work, and it seems significant that the only two walls of this kind which have hitherto been discovered are also in Yucatan, one being at Tuluum, on the east coast, and the other at Chicken Itza, in the northern interior. Against whom were these defences erected? Judging by the date on the stela, they were built centuries before the Mayas came in contact with the Tolecs, on the north. It has been assumed that Yucatan was uninhabited when the Mayas first took possession of it, and they were not in the habit of building such walls in the earlier cities to the south. Why this innovation?

'The space enclosed by this wall had evidently been densely populated in bygone times. For in the places where the Indians have cleared the undergrowth away, one could see that the ground is literally covered with potsherds, flint and obsidian chips, clay beads, spindle whorls, small human and animal heads, and other surviving evidences of human habitation.

'A great concourse of people must have lived there for many generations.

'The discovery of these ruins was, more or less, incidental. During this season my primary objective is Northern Yucatan, where Professor Morley, of the Carnegie Institute, and I propose to test the truth of some wonderful Indian legends. The Indians have told me of a vast subterranean cavern some twenty miles long, and of the ruins of a great city which no white man has seen.

'Along the east coast of Yucatan live the Santa Cruz Indians, presumably the direct descendants of the ancient Mayas who erected magnificent temples and palaces, most of which now lie buried in the tropical forests. Some have been discovered, but there is no doubt that a great number of them yet remain to be discovered.

'The Santa Cruz Indians have never been subdued, and for five centuries they have successfully resisted all the efforts, first of the Spaniards and later of the Mexicans to conquer their country. These Indians so far as is known lead the lives of their ancestors of a thousand years ago. They worship the same gods and perform the ancient religious ceremonies. But we know little about them, because their villages are buried in the dense forests of the hills and they permit no stangers to intrude.

'The danger of penetrating into this Santa Cruz country arises from the fact that the suspicious Indians may fire from the bush without inquiry whether the strangers are friends or foes.'

About the vast cave of Loltun, which is possibly the largest cavern in the world he adds that 'this cave is entered by great well-like holes in the earth through which one descends by ladders from ledge to ledge arriving in immense rocky chambers whose floors are covered with stalagmites and cave earth, and from whose lofty roofs depend vast stalactities. Two of these holes are a mile apart, and the intervening space has never been traversed by a European. From the great chambers unexplored passages branch out in every direction. On the floors of the chambers, buried in the cave earth, innumerable potsherds have already been found, also human and animal bones, flint and stone weapons and implements, and many other relics of the ancient inhabitants. It is possible that the deeper layers of earth and the remote galleries and passages may contain relics of the pre-Maya inhabitants of Yucatan, of whom nothing whatever is known at present.

'It is said by the Indians that subterranean passages from this cavern reach to the ruined city of Chicken Itza 20 miles away. There is a tradition handed down amongst the modern Indians that during one of the innumerable internecine wars amongst the Maya which followed the breaking up of the central authority, after the Conquest of Mayapan, the inhabitants of a neighbouring village were driven to take refuge in this cave by a band of their enemies, who pursued them even into this last refuge, and that of neither pursued nor pursuers was any trace ever again seen.

'Some believe that in the dark all fell over a precipice into some vast chasm in the limestone, others that all lost their way in the intricate maze of endless galleries, and others again that all were suffocated by poisonous gases. Whatever their fate, the possibility of coming suddenly at any turn upon groups of rag clad skeletons shrouded in the impalpable dust of ages does not detract from the eerie feeling induced by traversing these vast catacombs, where silence is almost palpable. One's feet make no noise on the soft cave earth, and one is almost afraid to raise one's voice, which reverberates round the Great Stone chambers and is thrown back in a thousand mocking echoes from the rocky walls. Upon the walls of the lighted chamber many crude drawings have been left by the former inhabitants, and in one case is inscribed a late Maya date A.D. 1379.'

'Whatever Dr. Gann's conclusions may be his actual discoveries are of stupendous interest. The causeway that he has found is of supreme importance. He regards it as having been built for the purposes of human sacrifice. I disagree. My reason for disagreeing is that there are similar causeways in Cambodia, which were designed purely for ceremonial purposes.

'The whole Maya remains as discovered show the closest possible relation with the civilization as it existed in Java and South-East Asia to what has been found in Yucatan. There is nothing to my mind that suggests that the form of civilization is indigenous, and I should be inclined to hold that the temples at Java were the proto-types of what has been found in Yucatan.

'Unquestionably in the early days perishable wood structures were built, but when stone supplanted wood, you find pyramids being built precisely on the same lines that they were being built in South-East Asia. They were, so far as the staircases were concerned, a copy of what the Babylonians were building 2,000 years before the era of Christ. It is necessary to remember that as Indian civilization spread eastwards the type of pyramids established by them became fashionable and was built in stone.

'While the great causeway was of outstanding interest, it had to be remembered that it could be paralleled with the remains of Indian civilization. Further there was no question but that Maya carvings represented Indian elephants and Indians with typical head-dresses.

'Indian navigators, it was known, had combed out the islands in the Pacific, such as Easter Island and many others, and it was unthinkable that they should not have discovered a continent that stretched from pole to pole.

'To the archaeologist the issue now raised was of supreme importance. Until fifty years ago the orthodox held that the Maya civilization was of Indian origin. The dating derived from the hieroglyphs was so vague as to give little help, and interpretation varies by as much as three or six centuries.

'What supremely interests the archaeologists,' Professor Elliot Smith continues, 'is that we find a civilization starting full-blown in Central America. Under Asiatic influence, it rose to great heights, but had already collapsed before the advent of the Spaniards who may have given it the *coup de grâce*. To know the real secret of Maya culture affects our whole interpretation of civilization.

'Can different communities, such as the Indian, the Chinese and the American, build up a civilization independent of each other, or is it possible for a certain civilization to be spread about the world in the same way that a steam engine can be distributed?

'This is the great problem of ethnology today, and the issue now centres in the problem as to how civilization started in Central America. There is a large gap between Asia and America, but if diffusion means anything it means that that gap must have been bridged as I have shown it could have been.

'The Maya civilization rose and fell. It fell so soon as the energy of the driving force that inspired it declined. This is our view, and we do not believe in an indigenous culture that rose through its own impetus, and that fell as a result of foreign invasion.'

No one now questions Dr. Gann's facts, but many competent archaeologists dispute the conclusions at which he arrived. An archaeological issue has now been fairly raised. Did the Maya civilization arise from native American civilization, or was it the result of peaceful penetration by the Asiatic?

Professor Grafton Elliot Smith, of University College, London, discussing the subject with a *Morning Post* representative disagreed absolutely with the views put forward by the American school, and supported by Dr. Gann.

'At University College,' he said, 'we are absolutely convinced that the Maya civilization was directly derived from India. We regard it as certain that between the Fourth and the Twelfth Century there was a penetration from the South-East of Asia. The question of dating is admittedly difficult, but from the facts we have in our possession I should be inclined to think that Dr. Gann's dates may err by as much as three centuries.'

(Central News, quoted from *Morning Post*, by *Statesman*, March 21, April 9, 17, 15, 1926.)

MAHĀ-NIRVĀṆA-TANTRA—Deals with both architectural and sculptural matters, such as temples, idols, phallus, ponds, and tanks, as well as with the directions concerning broken limbs of images, especially the materials of which buildings and idols should be made the Vāstu god, and so on (Chapter XIII, verses 22–286, *see* also chapters XIV and VI).

MAHĀBHĀRATA—(First Bombay edition; 2nd Calcutta edition Gild. Bibl. 93)—Sabhā-parvan, chapters:

1. Maya built a council hall (sabhā) for the Pāṇḍavas.
7. Indra-sabhā-varṇana.
8. Yama-sabhā-varṇana.
9. Varuṇa-sabhā-varṇana.
10. Kubera-sabhā-varṇana.
11. Brahma-sabhā-varṇana.

MĀNA-KATHANA—On the system of measurement.

(Oppert's *List of Sanskrit MSS*, *ibid.*, Vol. II, p. 473.)

MĀNAVA-VĀSTU-LAKSHAṆA—On architecture.

(Oppert's *List of Sanskrit MSS.*, *ibid.*, Vol. I, p. 476.)

MĀNASA—(Same as MĀNASĀRA). *See* below.

(Oppert's *List of Sanskrit MSS.*, *ibid.*, Vol. II, p. 518.)

MĀNASĀRA—(edited and translated into English for the first time by the writer)—The standard treatise and a complete text on architecture and sculpture. It comprises 70 chapters in more than 10,000 lines. There are eleven manuscripts of it. *See* the details given under the Preface of its first edition by the writer and compare the writer's *Summary of Mānasāra*, Leiden, 1917, in *the Indian Architecture according Mānasāra-Silpa-śāstra*, 1927, and in *Hindu Architecture in India and Abroad.*

MĀNASOLLĀSA—(R. L. Mitra's *Notices of Sanskrit Manuscripts*, Vol. III, p. 182)—Attributed to the Chālukya king Someśvara. In two chapters, it deals with the following subjects :

1. Mandirārambha-muhūrta-kathana.
2. Shoḍaśa-prakāra-gṛiha-lakshaṇa.
3. Rāja-gṛiha-lakshaṇa.
4. Vāstu-deva-pūjā-vidhi.
5. Gṛiha-praveśa-kathana.
6. Gṛiha-varṇana.
7. Gṛiha-chitra-varṇa-lakshaṇa.
8. Vajra-lepa-lakshaṇa.
9. Lekhanī-lakshaṇa.
10. Tāmbula-bhoga-kathana.
11. Vilepanopabhoga-kathana.
12. Vastropabhoga-kathana.
13. Mālyopabhoga-kathana.
14. Bhūshābhoga-kathana.
15. Āsana-bhoga-kathana.
16. Putrādi-bhoga-kathana.
17. Anna-bhoga-kathana.
18. Pānīya-bhoga-kathana.
19. Abhyaṅga-bhoga-kathana.
20. Yāna-bhoga-kathana.
21. Chhatra-bhoga-kathana.
22. Śayyā-bhoga-kathana.
23. Dhūpa-bhoga-kathana.
24. Strī-bhoga-kathana.

This work should not be confounded with that of the same name in Taylor's *Catalogue Raisonée* (Vol. I, p. 1) and its commentary, Mānasollāsa-vṛittānta-prākāśa (in Weber's *Berlin Catalogue*, p. 179.)

MĀNASOLLĀSA-VṚITTĀNTA-PRAKĀŚA—On architecture (*cf.* Gaekwad Sanskrit Series).

(In possession of Vimāna-Achārya, Benares, Weber's *Berlin Catalogue*, p. 179.)

MŪRTTI-DHYĀNA—On sculpture.

(Aufrecht, *ibid.*, Part I, p. 464.)

MŪRTTI-LAKSHAṆA—On idol-making.

(*Ibid* p. 464.)

There is another manuscript bearing the same title which is stated to have been taken from the *Garuḍa-saṁhitā.*

MŪLA-STAMBHA-NIRṆAYA—On architectural description of the main pillar of a house.

(*Ibid.*, p. 464, Oppert's *List of Sanskrit MSS.*, *ibid.*, Vol. II, p. 202.)

R

RATNA-DĪPIKĀ—(Attributed to Chaṇḍeśvara)—On architecture.

(Aufrecht, *ibid.*, Part II, pp. 36, 114.)

RATNA-MĀLĀ—of Śrīpati—Deals with astrological matters in connexion with the construction of houses and idols of deities under the following chapters :

17. Vāstu-prakaraṇa (28 verses).
18. Gṛiha-praveśa (11 verses).
20. Deva-pratishṭhā (13 verses).

RĀJA-GṚIHA-NIRMĀṆA—On the building of royal palaces.

(Burnell's *Classified Index to the Sanskrit MSS. in the Palace Library of Tanjore*, 1880.)

RĀJA-VALLABHA-ṬĪKĀ—A commentary on Rājavallabha-Maṇḍana.

(*Catalogue of Sanskrit MSS. in Private Libraries of Gujarat*, etc., 1872, p. 276.)

RĀMĀYAṆA—(First Calcutta edition, ed. Schlegel Gild. Bibl. 84, ed. Gorrens, Gild, Bibl. 85, 2nd Bombay edition)—Devotes large portions of the following chapters on architecture :

Ādikāṇḍa, 5th Sarga, the description of the city of Ayodhyā.

Laṅkākāṇḍa, 3rd Sarga, the description of the fort of Laṅkā.

(There are also numerous casual references to architectural and sculptural matters in the Epics, the Purāṇas and the Āgamas.)

RĀŚI-PRAKĀRA—(Attributed to Garga)—Deals with astrological matters concerning architecture.

(*See Vāstu-Sāraṇi.*)

RŪPA-MAṆḌANA—(Attributed to Maṇḍana Sūtradhāra)—On architecture.

(*Cf.* Rājavallabha Maṇḍana.)

L

LAKSHAṆA-SAMUCHCHAYA—On the features in images of deities, quoted by Hemādri in Dānakhaṇḍa (p. 823), in Muhūrta-dīpakā, and Paraśurāma-prakāśa.

(Aufrecht, *ibid.*, part 1, p. 535.)

LAGHU-ŚILPA-JYOTISHA—On architecture.

(*British Museum Catalogue*, 20, E. 32.)

LAGHU-ŚILPA-JYOTIḤ-SĀRA—By Śivarāma, with a Gujarati commentary—This pamphlet deals mostly with astrological matters concerning architecture. The contents are indicated in the following verses :

Āya-rāśiś cha nakshatraṁ vyayas tārāṁśakas tathā ।
Gṛaha-maitrī rāśi-maitrī nātivedha-gaṇendavāḥ ॥ (3)
Ādhipatyaṁ vāra-lagne tithy-utpattis tathaiva cha ।
Ādhipatyaṁ varga-vairaṁ tathaiva yoni-vairakam ॥ (4)
Ṛiksha-vairaṁ sthitir nāśo lakshaṇāny eka-viṁśatiḥ ।
Kathitāni muni-śreshṭhaiḥ Śilpa-vidvadbhir gṛihādishu ॥ (5)

LIṄGA-PURĀṆA—*See* under PURĀṆAS.

V

VALI-PĪṬHA-LAKSHAṆA—On architecture.

(Oppert's *List of Sanskrit MSS.*, *ibid.*, Vol. 1, p. 473.)

VĀYU-PURĀṆA—*See* under PURĀṆAS.

VĀSTU-CHAKRA—On architecture.

(Oppert's *List of Sanskrit MSS.*, *ibid.*, p. 538.)

VĀSTU-TATTVA—(By Gaṇapati Śishya, Lahore, 1853)—Consists of four chapters and deals largely with astrological matters concerning architecture.

VĀSTU-NIRṆAYA—On architecture, dealing specially with the classes of vāstu (*see* under VĀSTU).

(Aufrecht, *ibid.*, part 1, p. 568.)

VĀSTU-PURUSHA-LAKSHAṆA—On architecture.

(Taylor's *Catalogue Raisoneé of Oriental MSS. in the Library of the late College of Fort St. George*, Vol. I, p. 313.)

VĀSTU-PRAKĀŚA—(Attributed to Viśvakarman)—On architecture.

(Aufrecht, *ibid.*, Part I., p. 568, in possession of Bālābhāri Sapre, Benares, *Catalogue of Sanskrit MSS. in N. W. P.*, 1885, Part X, no. 2, p. 56.)

VĀSTU-PRADĪPA (*cf.* VĀSTU-SĀRAṆI)—By Vāsudeva, on architecture.

(In possession of Umāśaṁkara-Śāstrī, Azamgarh, *Catalogue af Sanskrit MSS. in N. W. P.*, 1885, Part X, no. 1, p. 56.)

VĀSTU-PRAVANDHA—(By Lālā Rājakiśora Varmā, Lucknow, 1904)—It deals largely with astrological matters in connexion with architecture, and contains extracts from the *Bṛihat-saṁhitā*, *Viśvakarmā-prakāśa*, *Muhūrta-chintāmaṇi*, *Saṁgraha-śiromaṇi*, *Vāstu-vidyā-prakāśa*, *Vāstu-pradīpa*, *and Jyotis-sāra-muhūrta-chakra-dīpikā*.

VĀSTU-MAÑJARĪ—(Attributed to Maṇḍana Sūtradhāra)—On architecture.

(*Cf.* Rājavallabha-Maṇḍana.)

VĀSTU-MAṆḌANA—(Attributed to Maṇḍana Sūtradhāra)—On architecture.

(*Cf.* Rājavallabha-Maṇḍana.)

VĀSTU-YOGA-TATTVA—(Attributed to Raghunandana)—Treats largely of offerings to Vāstu deity, and contains extracts from the *Matsya-Purāṇa*, *Devī-Purāṇa*, *Rudra-yāmala*, and *Vasishṭha-saṁhitā*.

VĀSTU-RATNA-PRADĪPA—On architecture.

(*Cf. Vāstu-sāraṇi.*)

VĀSTU-RATNĀVALĪ—(Compiled by Pandit Jivanath Jyotishi, Benares, 1883)—This compilation contains extracts from the *Bhavishya-Purāṇa*, *Jyotiḥ-sāgara*, *Gṛiha-kārikā*, *Vāstu-pradīpa*, *Bhuja-bala-bhīma*, *Vasishṭha-saṁhitā*, *Śri-bhoja-rāja*, *Rāja-vallabha*, *Vāstu-ratna-pradīpa-Siddhānta-śiromaṇi*, of Bhāskarāchārya, *Maṇḍana-sūtra-dhāra*, *Bṛihat-saṁhitā* of Varāhamihira, and *Ratna-mālā*.

(Burnell's *Classified Index to the Sanskrit MSS. in the Palace Library of Tanjore*, p. 154.)

VĀSTU-RĀJA-VALLABHA—(Attributed to Maṇḍana Sūtradhāra, probably same as *Vāstu-śāstra*, otherwise called *Śilpa-śāstra*)—On architecture.

(*Catalogue of Sanskrit MSS. in N.W.P.*, *ibid.*, p. 56.)

VĀSTU-LAKSHAṆA—On architecture.

(Oppert's *List of Sanskrit MSS.*, *ibid.*, Vol. I, p. 480.)

VĀSTU-VICHĀRA—(Attributed to Viśvakarman)—A treatise on architecture, apparently old.

(In possession of Gaurīnath Śāstri, Benares, *Catalogue of Sanskrit MSS. in N.W.P.*, 1885, *ibid.*, p. 56, Aufrecht, part I, p. 568.)

VĀSTU-VIDYĀ—(a manuscript, *see* Oppert's *List of Sanskrit MSS.*, *ibid.*, Vol. I, p. 480 ; Aufrecht, *ibid.*, part I, p. 578 ; also a text edited by T. Gaṇapati Śāstri, 1913)—Deals with materials, etc. for house building in the following sixteen chapters :

1. Sādhana-kathana.
2. Vasudhā-lakshaṇa.
3. Vāstu-devatā-kathana.
4. Vāstu-purusha-kathana.
5. Vedi-saṁsthāna.
6. Vāstu-marma-saṁsthāna.
7. Kāla-niyama.
8. Śālā-vidhāna.
9. Pada-māna-kathana.
10. Lupā-lakshaṇa.
11. Lupā-karaṇa.
12. Dhūli-nirodhana.
13. Dvāra-vinyāsa.
14. Kavāṭa-dvāra-vinyāsa.
15. Bhavana-parigraha.
16. Mṛil-loshṭa-lakshaṇa.

VĀSTU-VIDHI—(Attributed to Viśvakarman)—On architecture.

(Aufrecht, *ibid.*, part I, p. 568.)

VĀSTU-ŚĀSTRA (*see* under SANAT-KUMĀRA)—On architecture.

(Oppert's *List of Sanskrit MSS.*, *ibid*, Vol. I, p. 580.)

VĀSTU-ŚĀSTRA—(also called *Śilpa-śāstra*)—Attributed to Rājavallabha Maṇḍana and Bhūpati-vallabha (noticed in *Egg.* 3142, 1291) : one of these manuscripts is published in Saṁvat 1947, at Anahila-

pura in Pataṇa, by Nārāyaṇa Bhārati and Yaśavanta Bhārati—It has a Gujarati commentary and some illustrative diagrams. (Noticed in the Catalogue of printed books and manuscripts in Sanskrit belonging to the Oriental Library of the Asiatic Society, Bengal, p. 173).

It has four more copies—Egg. 3143, 3144, 3145, 3146, p. 1136.

This is a work on architectural disposition of houses, palaces, temples, etc., and the rite to be performed at their inauguration, by Maṇḍana, an architect in the employ of king Kumbhakarṇa of Medapāṭi (and the husband of Mārābai). According to Tod, 'the king Kumbha, who had a taste for arts and built many temples and strongholds, ruled over the country of Mewāra from A. D. 1419 to 1469.' (*Bhandarkar's Report*, 1882–83, p. 37.)

It contains the following fourteen chapters :

1. Miśraka-lakshaṇa.
2. Vāstu-lakshaṇa.
3. Āyādi-lakshaṇa.
4. Prakāra-yantra-vāpi-kūpa-taḍāga-lakshaṇa.
5. Rāja-gṛiha-niveśādi-lakshaṇa (verse 28 of this chapter mentions the *Matsya-Purāṇa* as an authority).
6. Eka-śālā-dvi-śālā-gṛiha-lakshaṇa.
7. Dvi-śālā-tri-śālā-chatuḥ-śālā-gṛiha-lakshaṇa.
8. Śayana-siṁhāsana-chhatra-gavāksha-sabhāshṭaka-vedikā-chatushṭaya-dīpa-lakshaṇa.
9. Rāja-gṛihādi-lakshaṇa.
10. (Māpita) kshetrādbhūta-lakshaṇa.
11. Dina-śuddhi-gṛiha-niveśa-gṛiha-praveśa-vivāha-muhūrta-lakshaṇa.
12. Gochara-dina-rātri-māna-svarodaya-koṭa-chakra-mātṛikā-lakshaṇa.
13. Jyotisha-lakshaṇa.
14. Śakuna-lakshaṇa.

Six other works are ascribed to Maṇḍana :

I. Rūpa-maṇḍana.
II. Vāstu-maṇḍana.
III. Prāsāda-maṇḍana.
VI. Āya-tattva.
V. Vāstu-mañjarī.
VI. Vāstu-sāra.

VĀSTU-ŚĀSTRA-SAMARĀÑGANA-SŪTRADHĀRA—(Attributed to Bhojadeva)—On architecture.

(Aufrecht, *ibid.*, part 1, p. 568.

VĀSTU-ŚIROMAṆI—On architecture.

(Aufrecht, *ibid.*, part 1, p. 568.)

There is another manuscript of the same title, attributed to Mahārāja Śyāmasāha Śaṅkara.

VĀSTU-SAMUCHCHAYA—On architecture.

(Aufrecht, *ibid.*, part 1, p. 568.)

VĀSTU-SAṀKHYĀ—On architecture, "an extract of Toḍarānanda, very rare, complete and incorrect."

(*Catalogue of Sanskrit MSS. in N. W. P.*, 1885, part IX, p. 56.)

VĀSTU-SAṀGRAHA—(Attributed to Viśvakarman)—On architecture.

(Aufrecht, *ibid.*, part 1, p. 568.)

VĀSTU-SAṀGRAHAMU—Contains 100 pages, written in Telugu character, and deals largely with astrological matters concerning architecture.

(*Mackenzie Collection*, by Wilson, p. 171.)

VĀSTU-SARVASVA—On architecture, comprises 16 pages.

(By Nanjunda Dikshita, published by V. Rāmasvami Śāstralu and Sons, Madras, 1916.)

VĀSTU-SĀRA—(Attributed to Sūtradhāra Maṇḍana)—With a Gujarati commentary (Ahmedabad, 1878), it deals largely with astrological matters concerning architecture. There is also another manuscript of same title.

(Aufrecht, *ibid.*, part 1, p. 569.)

VĀSTU-SĀRAṆI—(by Māṭri Prasāda Pāṇḍe, Benares, 1909)—This is a manual of astrological details in connexion with the construction of a house, compiled from the following treatises :

I. Grāma-nirṇaya, of Nārāyaṇa.
II. Rāśi-prakāra, of Garga.
III. Daśā-prakāra, of Vasishṭha.
IV. Dik-sādhana, of Bhāskara.
V. Sthala-śubhāśubha-kathana, of Nārāyaṇa.
VI. Vāstu-pradīpa.
VII. Rāhu-mukha, by Rāma.
VIII. Viśvakarmā.
IX. Piṇḍa-prakāra, by Gopirāja.
X. Nārada.

XI. Dhruvādi-shoḍaśa-gehāni, by Gaṇapati.
XII. Gṛihārambha, by Śrīpati.
XIII. Vāstu-ratna-pradīpa.
XIV. Dikshu-vṛikshāropaṇa, by Gaṇapati.

VĀSTU-SĀRA-SARVASVA-SAṀGRAHA—(Bangalore, 1884, with a Canarese commentary)—A compilation on architecture.

VIMĀNA-LAKŚHAṆA—On architecture.

(In possession of Archaka Yogānanda Bhaṭṭa of Melkoṭa; Oppert's *List of Sanskrit MSS.*, *ibid.*, Vol. II, p. 266.)

VIŚVAKARMA-MATA—Quoted by Hemādri in Pariśesha-khaṇḍa (2, 817, 825, 827, 828).

(Aufrecht, *ibid.*, part II, p. 138.)

There is another treatise ascribed to Viśvakarman (Rājendralala Mitra, *Notices of Sanskrit MSS.*, Calcutta, 1871, Vol. II, no. 731, p. 142), fol. 63, English paper $9\frac{3}{4}'' \times 7\frac{1}{2}''$, copied 1872.

'None of the manuscripts examined by Mr. Burnell is perfect or even tolerably correct.'

It is a treatise on the manual arts attributed to Viśvakarma, the divine architect, but apparently a compilation; it is written in the Tantric style, having Śiva for its narrator. The manuscript has been copied for Dr. Mitra from old codex in the Halakānāḍā character in the Library of the Rāja of Tanjore. The contents are classified under the following seventeen chapters:

1. Viśvakarmotpattiḥ, karma-viśesha-bhedena vyavahṛita-takshaka varddhakyādi-śabda-vyutpatti.
2. Satyādi-yuga-jāta-narochchatā-pramāṇam, yajñīya-kāshṭhena-prastareṇa vā deva-pratimā nirmāṇe mānādi.
3. Takshakasya garbhādhānādi-saṁskāra-kathanaṁ, garbhotpātti-kathanādi.
4. Śiva-liṅgādi-pratishṭhārthāṁ sabhā-nirmāṇādi.
5. Gṛaha-pratimā-nirmāṇa-pramāṇaṁ, liṅga-pīṭha-nirmāṇa-pramāṇādi.
6. Ratha-nirmāṇa-vidhi-kathanam.
7. Ratha-pratishṭhā-vidhi.
8. Brāhmī-Māheśvaryādīnāṁ sva-rūpādi-varṇādi.
9. Yājñopavīta-lakshaṇa.
10. Suvarṇa-rajata-mauñjyādi-nirmita-yajñopavīta-kathanam, dig-bhedena deva-sthāpana-prakārādi, meru-dakshiṇa-sthita-hema-śilā-kathanādi.

11. Lakshmī-Brāhmī-Māheśvaryādi-devīndrādi-dik-pāla-grahādi-mūrti-nirmāṇa-prakāra.

12-13. Mukuṭa-kirīṭa-jaṭā-mukuṭādi-nirmāṇa-prakārādi.

14. Sthāvarāsthāvara-siṁhāsana-nirmāṇa-prakārādi, punar viśeṣeṇa kirīṭa-lalāṭa-paṭṭikādi-nirmāṇa-prakāra, Devatāyā mandirasya jīrṇoddhāra-prakāra.

15. Liṅga-mūrti-mandira-dvārādi-kathana.

16. Pratimā-mūrti-mandira-dvārādi-kathana.

17. Vighneśa-mūrti-mandirādi-nirmāṇādi-vidhi.

VIŚVAKARMĀ-JÑĀNA—(edited by Kṛishṇa Śaṅkara Śāstri, the real author is not known)—This pamphlet treats largely of ritualistic matters, such as the sacrifices, etc., to Viśvakarman.

VIŚVAKARMĀ-PURĀṆA—The title here adopted is that given to the volume on the fly-leaf. No colophon of any kind is met with on the manuscript. It is very incorrect and illegible. It has a Telugu commentary equally unintelligible. It deals with architectural matters.

(*Egg. MSS.*, 3153, 2614 ; Oppert's *List of Sanskrit MSS., ibid.*, Vol. I, p. 480.)

VIŚVAKARMĀ-PRAKĀŚA—(*Egg. MSS.*, p. 112*a*) also called *Vāstu-śāstra*—It gives a course of directions in thirteen chapters, on the building of houses, the making of roads, tanks, etc. and the rites observed on such occasions, purporting to be founded on the revelation of Viśvakarman, still further traced back successively to Bṛihadratha, Parāśara, and Śambhu.

The following editions of it are published :

I. This is published in the Śrīvenkaṭeśvara Press, Bombay, by Khemrāja Śrī Kṛishṇadāsa, in Samvat 1952, Śaka 1817.

II. This is published without any commentary at Benares, in 1888.

III. This is a translation of Pālārāmavilāsa into Bhāshā, by Mukula Śaktidhara Śarmā, Lucknow, 1896.

The topics treated of in the thirteen chapters are the following :

1. Maṅgalācharaṇa.
2. Vāstu-purushotpatti-varṇana-pūrvakaṁ-pūjanādika.
3. Bhūmi-lakshaṇaṁ phalaṁ cha.
4. Gṛiha-praveśa-samaye śakuna-phala.
5. Khanana-vidhi.
6. Svapna-vidhi.

7. Bhūmi-phala.
8. Gṛihārambhe samaya-śudhi.
9. Dhvajādyāya-phalāni.
10. Āya-vyayāṁśādīnāṁ phalāni.
11. Gṛiha-madhye devādīnāṁ sthāpana-nirṇaya.
12. Dhruvādi-gṛiha-bheda.
13. Dvāra-mānāni.
14. Stambha-pramāṇāni.
15. Gṛihāṇāṁ śālā-nirṇaya.
16. Gṛihārambha-kāla-nirṇaya.
17. Gṛihārambhe lagna-kuṇḍalishṭha-gṛaha-phalāni.
18. Śayyā-mandira-bhuvana-śudhārādi-gṛihāṇāṁ lakshaṇāni.
19. Pāduka-upānaha-mañchādīnāṁ māna-lakshaṇa.
20. Śaṇku-śilā-nyāsa-nirṇaya.
21. Vāstu-deha-lakshaṇaṁ pūjanaṁ bali-dānaṁ cha.
22. Śilā-nyāsa (*cf.* 20 above).
23. Prāsāda-vidhāna.
24. Śilpa-nyāsa.
25. Prāsāda-nirṇaya.
26. Pīṭhikā-lakshaṇa.
27. Maṇḍapa-lakshaṇa.
28. Dvāra-lakshaṇa.
29. Vāpī-kūpa-taḍāgodyāna-kriyā.
30. Dāru-chhedana-vidhi.
31. Gṛiha-praveśa-nirṇaya.
32. Gṛiha-praveśa-kāla-śuddhi.
33. Śayyāsana-dolikādīnāṁ lakshaṇa.
34. Praveśa-kalaśa-chakrādi-vāstu-śānti.
35. Durga-nirṇaya.
36. Salya-jñānaṁ śalyoddhāra.
37. Nāgara-saṁbandhi-rāja-gṛihādīnāṁ nirṇaya.

VIŚVAKARMĀ-SAMPRADĀYA—On architecture, dealing specially with a mythological account of the race of architects descended from Viśvakarman.

(*Egg. MSS.* IV, 3151, 2680.)

VIŚVAKARMĪYA-ŚĪLPA-ŚĀSTRA—On architecture and cognate arts.

(*Oriental Manuscripts Library, Madras, Catalogue*, Vol. XXII, no. 13057, p. 8775, written on 100 pages of palm-leaf 11″ × 1½″; copied by one Niṭla Sūrappa on Saturday, the 5th day of the bright fortnight of the Āśvija month in the year Jaya).

The author acknowledges his debt to Brahmā, Indra, Maya, Bhārgava, Āṅgirasa, Dhruva, Gautama, Gārgeya, Manu, Vyāsa and Bhṛigu. He also cites from Āgastya.

The colophon runs thus—Viśvakarma-śāstre Viśvakarma-mate, etc.

VIŚVA-VIDYĀBHARAṆA—(Attributed to Basavāchārya)—This is a treatise on the duties of artisans, especially members of carpenter (Rathakāra) caste. Its scope is limited to the religious duties of the Rathakāra, who claims Viśvakarma, Viśvarūpa, and Tvashṭṛi, as his divine guardians. It consists largely of quotations from the Purāṇas, the Epics, the Sūtras, and other works. Of other authorities may be mentioned Rudradatta's commentary on the Āpastamba Sūtra, the Shaḍ-guru Bhāshya on the Āśvalāyana-Samānukramamaṇikā, the Vidyāraṇya, and the Sarasvatī-vilāsa with the commentary of Vijñāneśvara.

(*Egg. MSS.*, v, 3151, 2680 ; Aufrecht, *ibid*, part II, p. 138.)

VEDĀNTA-SĀRA—by Gārlapata Lakshaṇāchārya—It contains 79 pages, has a Telugu commentary, and treats of the size of images, the proper time for commencing to build, and similar subjects.

(*Egg. MSS.*, II, 3151, 2680.)

VAIKHĀNASA—On architecture.

(Aufrecht, *ibid.*, part I, p. 610.)

VAIKHĀNASĀGAMA—*See* under Āgamas.

Ś

ŚĀSTRA-JALADHI-RATNA—by Hari Prasāda—On architecture.

(Aufrecht, *ibid.*, part I, p. 644.)

ŚILPA-KALĀ-DĪPAKA—On architecture.

(Aufrecht, *ibid.*, part I, p. 647.)

ŚILPA-GRANTHA—by Bhuvanadeva Āchārya (*Egg. MSS.*, 3152, 1603 *b*, written in modern Deva-nāgarī)—A short history of the work is given at the beginning. It is stated that God at the request of Aparājita reveals the theory of constructive art, from the creation of mundane egg to the erection of a town gate, and the measurements of banners, water pots, and bells in sanctuaries.

It is almost identical to (1) Aparājita-pṛichchhā by Bhava (? Bhuvana) deva, mentioned in Dr. Bhandarkar's Report (1883–1884, p. 276), and to (2) Aparājita-vāstu-śāstra ascribed to Viśvakarman, mentioned in Dr. Bühler's *Catalogue of Gujarat MSS.* (IV. p. 276).

ŚILPA-DĪPAKA—by Gaṅgādhara (B. H. *Catalogue*, 15, G. 14, 14, B, 16)—On architecture, printed by Mahadeo Rāmchandra; second edition in 1908, with diagrams of instruments and houses, etc.

ŚILPA-NIGHAṆṬU—by Aghore Śāstri—On architecture.

(*Classified Catalogue of Sanskrit Works in the Sarasvati Bhāṇḍāra Library of Mysore*, class XIX, no. 533.)

ŚILPA-RATNA—by Śrīkumāra (Trivandrum Sanskrit Series, no. LXXV) under instructions from king Devanārāyaṇa of Ambalapuzha in Travancore)—Deals with several architectural matters and painting in 46 chapters, compiled from *Mānasāra* and other treatises (*see* details in the writer's *Hindu Architecture in India and Abroad*, pp. 176–177).

ŚILPA-LEKHA—On architecture, according to Rāya-mukuṭa quoted by Sarvadhara.

(Aufrecht, *ibid.*, part 1, 647.)

ŚILPA-ŚĀSTRA—(*Egg. MSS.*, 3148, 3012), ascribed to both Kāśyapa and Āgastya—Contains 276 foll. of which 1–72 marked at the top 'Śilpa Śāstra'; 73–150, 251–276, 'Śilpa-Śāstram Kāśyapeyam,' and 151–250 'Śilpa-Śāstram Āgastyam.' This is apparently a combination of two separate works, of Kāśyapa and Āgastya.

One copy was transcribed (for C. P. Brown) from a Telugu manuscript at Masulipatam in 1832. It consists of extracts from various works on idols, shrines, etc. as stated in the following chapters:

1. Aṁśumāna-bhede kāśyape parivāra-lakshaṇa-paṭala.
2. Umāskanda-sahita-lakshaṇa-paṭala.
3. Chandra-śekhara-mūrti-paṭala.
4. Dakshiṇā-mūrti-lakshaṇa.
5. Kāla-mūrti.
6. Liṅgodbhava-lakshaṇa.
7. Nṛitta-mūrti.
8. Gaṅgādhara-mūrti.
9. Tri-purāntaka-mūrti.
10. Kalyāṇa-mūrti.
11. Ardha-nārīśvara-mūrti.
12. Gaja-bhāra-mūrti.
13. Pāśupata-mūrti.
14. Bhakta-lakshaṇa.
15. Bhū-māna-paṭala.
16. Grāmādi-lakshaṇa.

Foll.

151. Ity-āgastye-sakalādhikāre mānasa-grāhya-viśeshāṇāṁ prathamo'dhyāya.

181. Iti pañcha-viṁśati-rūpa-bheda.

251. Ity-aṁśumāna-bhede kāśyape tāla-bheda-paṭala.

266. Kāśyapa uttama-daśatāla-paṭala.

274. J(G)aurī-lakshaṇa-paṭala, adhama-daśa-tāla-pramāṇa.

This chapter is incomplete : the work terminates abruptly at the end of the 14th verse.

In the Oriental Manuscripts Library, Madras, there are more than a dozen manuscripts bearing the title of ' Śilpa-śāstra ' (*Catalogue*, Vol. xxii, nos. 13046, 13047, 13048–13056, 13057). Of these two (nos. 13046, 13047) are attributed to Āgastya, and one (no. 13057) to Viśvakarman. The rest of them are apparently compilations, as they are not ascribed to any author and contain frequent quotations from authorities like Kāśyapa, Mayamata, Viśvakarman, and Āgastya.

There is another manuscript bearing a slightly different title, ' Śilpa ' attributed to Viśvakarman. The details of this will be found under Viśvakarman.

There are four other manuscripts bearing the title of ' Śilpa-śāstra ' but containing no information regarding their authors. They are mentioned in the descriptive Catalogue of the *Mackenzie Collection* by H. H. Wilson (nos. 4–7) :

No. 4—deals with the construction of temples and images.

No. 5—deals with the construction of ornamental gateways.

No. 6—deals with the construction of images.

No. 7—deals with the construction of images and ornamental work in gold and silver.

There is yet another manuscript bearing the title ' Śilpa-śāstra.' It is attributed to Kāśyapa. It deals with the structure of Śaiva temples. (*See* the *Catalogué Raisoneé of Oriental Manuscripts in the Library of the late College of Fort St. George* by Taylor, Vol. i, no. 1585, p. 314.)

Another work bears a slightly different title, ' Śilpa-śāstra-bhūshālaya.' (*See* the *Classified Catalogue of Sanskrit Works in the Sarasvati Bhaṇḍāra Library of Mysore*, class xix, no. 533.)

A *Śilpa-śāstra* ' by Myen (Maya) is also extant. (*See Ind. Ant.*, Vol. v, pp. 230–293.)

Another ' Śilpa-śāstra ' containing no information regarding its author is mentioned. (*See* the *List of Sanskrit Manuscripts in Private Libraries of South India*, by Oppert, Vol. ii, no. 4187, p. 267.)

ŚILPA-ŚĀSTRA-SĀRA-SAṀGRAHA—(Compiled by a son of one Śivanārāyaṇa)—Consists of extracts from unspecified ancient (prāchīna) works on architecture, and was compiled in the Śaka era 1820.

The verses describing the Bhū-lakshaṇa (examination of soil) are same as those given in the *Śilpa-dīpaka* by Gaṇgādhara with a Gujarati translation by Kalyāṇadāsa.

ŚILPA-SARVASVA-SAṀGRAHA—A compilation on architecture.

(Aufrecht, *ibid.*, part 1, p. 647.)

ŚILPA-SAṀGRAHA—(a large manuscript covering 429 pages of 25 lines to a page of paper $13\frac{1}{4}'' \times 8''$)—It deals with the construction of temples and images. It is a compilation from various sources notably *Mānasāra*, *Mayamata*, *Viśvakarman*, *Āgastya*, *Kāśyapa*, *Paulastya*, *Nārada*, *Bhṛigu*, *Sārasvata*, *Dīptisāra*, *Viśvasāra*, *Chitrasāra*, *Chitrajñānā*, *Kapiñjala-saṁhitā*, *Brahma-yāmala*, *Chandrajñāna*, *Manohalya*, *Kaumudī*, *Nārāyaṇa* and others.

ŚILPA-SĀRA—(An incomplete manuscript in the Oriental Manuscripts Library, Madras, *Catalogue*, Vol. xxii, no. 13059, p. 877), containing no information regarding its author—(Comprises 76 pages and deals with the descriptive features (dhyāna) of gods and goddesses, apparently intended to guide the artist in making images.

ŚILPĀRTHA-ŚĀSTRA—On architecture.

(Oppert's *List of Sanskrit MSS. in Private Libraries of South India, ibid*, Vol. 1, no. 248, p. 26.)

ŚILPI-ŚĀSTRA—(*Egg. MSS.* 3149, 2578*b*)—covers 71 pages; the title is written on the fly-leaf in Telugu and Maraṭhi, with 'Vaustoo' (*Vāstu-śāstra*) added underneath. It is a treatise on architecture, with a Telugu commentary.

This manuscript is preceded in the same volume by two sections of the Nāgara-khaṇḍa of the *Skanda-Purāṇa*, viz. Viśvakarmopākhyāna, and Viśvakarma-vaṁśanuvarṇana.

ŚUKRA-NĪTI—(ed. Jīvānanda Vidyāsāgara)—Deals with architecture, and sculpture (in chapter iv, sections 4, 6) and refers to the following matters :

1. Deva-mandirādi-nirmāṇa-vyavasthā.
2. Pratimā-nirmāṇa-vyavasthā.
3. Mūrtīnāṁ vāhana-vyavasthā.
4. Gaṇapati-mūrti-vyavasthā.

5. Satī (Śakti)-mūrti-vyavasthā.
6. Bāla-mūrti-vyavasthā.
7. Sapta-tālādi-mūrti-bhāvasya nirmāṇa-vyavasthā.
8. Paiśāchī-mūrti-vyavasthā.
9. Bhagna-pratimā-sthāpana-vyavasthā.
10. Utsava-vyāpāra-vyavasthā.

Section 6 :

11. Durga-nirmāṇa (construction of forts, etc.).

There are frequent casual references to both architecture and sculpture in other portions of the treatise also.

ŚULVA-SŪTRAS—Refers to very important architectural matters. The rules for the size of the various Vedis, the shape and the variations of the Agni, etc. are given in the Brāhmaṇas long before they are embodied in the Kalpa-sūtras of which the Śulva-sūtras are but portions. But the explanations of the manner in which the manifold measurements and transformation had to be managed are not clear in the Brāhmaṇas.

Śulva-sūtra is the name given to those portions or supplements of the Kalpa-sūtras, which treat of the measurement and construction of the different vedis or altars, the word ' sūtra ' referring to the cords which were employed for those measurements. But in the Sūtras themselves the word ' rajju ' is used to express a chord and not the ' sūtra.' A Śulva Adhyāya or Praśna or Śulva-pariśishṭa belongs to all Kalpa-sūtras.

Among the treatises dealing with the measurement, etc., of the Vedis, the two most important are the Śulva-sūtras of Baudhāyana and of Āpastamba. Two smaller treatises, a Mānava Śulva-sūtra and a Maitrāyanīya Śulva-sūtra bear the stamp of later times, compared with the works of Baudhāyana and Āpastamba, which are entitled to the first place by a clearer and more extensive treatment of the topics in question. The literature of the white Yajur-veda possesses a Śulva-pariśishṭa, ascribed to Kātyāyana, and Dr. Thibaut rightly thinks that there is not a sufficient reason for doubting that it was really composed by the author of the Kalpa-sūtra.

' The Śulva-sūtras begin with general rules for measuring. In the next place they describe how to fix the right places for the sacred fires, and how to measure out the Vedis of the different sacrifices, the Samiki-vedi, the Paitriki-vedi, and so on. The remainder of the Sūtras contains the detailed description of the construction of the Agni, the large altar built of bricks, which was required at the great Soma sacrifices.'

The construction of altars, wherefrom seems to have developed the Chaityas, Dagobas, Temples, etc., was probably the beginning of ecclesiastical

architecture in India. The architectural details of these altars are interesting.

'The altar could be constructed in different shapes, the earliest enumeration of which is found in the *Taittirīya-saṁhitā* (v. 4–11). Following this enumeration Baudhāyana and Āpastambha furnish us with full particulars about the shape of all these different chitis and the bricks which were employed for their construction.'

'Everyone of these altars[1] was constructed out of five layers of bricks, which reached together to the height of the knee; for some cases 10 or 15 layers and a correspondingly increased height of the altar were prescribed. Every layer in its turn was to consist of two hundred bricks, so that the whole Agni (altar) contained a thousand; the first, third and fifth layers were divided into two hundred parts in exactly the same manner; a different division was adopted for the second and the fourth, so that one brick was never lying upon another brick of the same size and form.'

'The first altar covered an area of $7\frac{1}{2}$ purushas, that means, $7\frac{1}{2}$ square, the side of which was equal to a purusha, i.e., the height of a man with uplifted arms. On each subsequent occasion, the area was increased by one square purusha. Thus at the second construction of the altar one square purusha was added to the $7\frac{1}{2}$ constituting the first chiti, and at the third construction two square purushas were added, and so on.'

But the shape of the whole, the relative proportions of the single parts, had to remain unchanged. The area of every chiti whatever its shape might be, falcon, wheel, tortoise, etc., had to be equal to $7\frac{1}{2}$ square purushas. Thus squares had to be found which would equal to two or more given

[1](1) Chatur-asra-śyena-chit—so called because it resembles the form of a falcon and because the bricks out of which it is composed are all of a square shape.

(2) Kaṅka-chit—in the form of a heron (*cf.* Burnell, Cat. 29, of a Carrion Kite), is the same as Śyena-chit except the two additional feet.

(3) Alāja-chit—is the same as (2) except the additional wings.

(4) Prauga-chit—is an equilateral acute angular triangle; and the Ubhayataḥ Prauga-chit is made up of two such triangles joined with their bases.

(5) Ratha-chakra-chit—is in the form of a wheel, (*a*) a massive wheel without spokes, and (*b*) a wheel with sixteen spokes.

(6) Droṇa-chit—is like a vessel or tube, square or circular.

(7) Parichāyya-chit—has a circular outline and is equal to the Ratha-chakra-chit, differing in the arrangement of bricks which are to be placed in six concentric circles.

(8) Samuhya-chit—is circular in shape and made of loose earth and bricks.

(9) Kūrma-chit—resembles a tortoise and is of an angular or circular shape.

(*Cf. J. A. S. B.* 1875, part I, '*Śulva Sūtras*' by G. Thibaut.)

squares, or equal to the difference of two given squares, oblongs were turned into squares and squares into oblongs. Triangles were constructed equal to given squares or oblongs and so on. A circle had to be constructed, the area of which might equal as closely as possible that of a given square.

Diagrams of these altars are given in the *Pandit* (New Series, June, 1876, no. 1, Vols. I and IV, 1882 ; Old Series, June, 1874, no. 97, Vols. IX and X, May, 1876. *See* also *Śūlva Sūtra* by G. Thibaut, PH.D., *J. A. S. B.*, part I, 1875) and in the writer's *Hindu Architecture in India and Abroad* (Plates XX, *a*, *b*).

SH

SHAḌ-VIDIK-SAṀDHĀNA—On architecture, chiefly deals with the finding out of the cardinal points which are necessary for the orientation of buildings.

(Oppert's *List of Sanskrit MSS.*, *ibid.*, Vol. II, p. 200.)

S

SAKALĀDHIKĀRA—(Attributed to Agastya)—On sculpture, deals with image-making.

(Aufrecht, *ibid.*, part I, p. 683 ; Taylor, Vol. I, p. 72.)

SANAT-KUMĀRA-VĀSTU-ŚĀSTRA—Contains a brief Telugu commentary. The last colophon runs thus : iti Sanatkumāra-vāstu-śāstre sarvādhikāras samāptaḥ. It deals with a few architectural topics in eight chapters.

(*See* details in the writer's *Hindu Architecture in India and Abroad*, p. 172.)

(*Egg. MSS.*, III. 3151, 2680 ; *see* also the *List of Sanskri MSS. in Private Libraries of South India*, by Oppert, Vol. I, no. 8239, p. 580.)

In the Oriental Manuscripts Library, Madras, there are nine incomplete manuscripts of this work (*see* Vol. XXII, no. 13060–13068, p. 8780 f.). They deal with the following subjects :

1. Gṛiha-saṁsthāpana.
2. Nakshatra-graha-yoga-vidhi.
3. Graha-lagna-vidhi.
4. Taru-tantra-vidhi.
5. Bhū-parīkshā-vidhi.
6. Nakshatra-tithi-vāra-śuddhi.
7. Nakshatra-lagna-phala-dvāra-bandha-śubha-sthāna-nirṇaya.
8. Gṛiha-praveśa.

Sanat-kumāra acknowledges his debt to Brahman, Śakra, Yama, Bhārgava, Aṅgirasa, Maya, Gautama, Garga, Manu, Vyāsa, Bhṛigu, Viśvakarman, and others (*see* no. 13060, p. 8781).

The same list is a little differently given in no. 13064, where Śakra is replaced by Chandra, and Maya is omitted. But in nos. 13062 and 13068 Śakra is not replaced by Chandra although Maya is omitted.

SARVA-VIHĀRĪYA-YANTRA—by Nārāyaṇa Dikshita—On architectural instruments, and machines.

(Aufrecht, *ibid.*, part 1, p. 702.)

SAṀGRAHA-ŚIROMAṆI—by Saryu Prasad—As the title implies it is a compilation on architecture and sculpture largely from Vasishṭha, Nārada, Varāha, Vāstu-pradīpa, Viśvakarman, Māṇḍavya, Maya-śāstra, Samarāṅgaṇa-Sūtradhāra, Sārṅgadhara and others.

SĀRASVATĪYA-ŚILPA-ŚĀSTRA—On architecture.

(Aufrecht, *ibid.*, part 1, p. 714.)

SUPRABHEDĀGAMA—*See* under ĀGAMAS.

SKANDA-PURĀṆA—*See* under PURĀṆAS.

STHALA-ŚUBHĀŚUBHA-KATHANA—by Nārāyaṇa—On architecture. It deals with auspicious and inauspicious sites for building.

(*Cf. Vāstu-sāraṇi.*)

H

HASTA-PRAMĀṆA—Attributed to Viśvakarman—On architectural measures.

(*Cf. Vāstu-sāraṇi.*)

APPENDIX II

A LIST OF HISTORICAL ARCHITECTS WITH SHORT NOTES ON THEIR WORKS [1]

A

ACHYUTA—An architect of A.D. 882–917.

'A man of Kāmboja descent, the son of Rāma, whose famous name is Achyuta, was here the overseer, he who is an image of Dhanvatri, an incarnation of the quintessence of learning, a friend of the virtuous, and a bee on the lotus of the heart of his master.'

'As Dhanvatari,' adds Dr. Bühler, 'is the Indian Asklepios, the statement that Achyuta was his image, may mean that he was a Vaidya by caste, or that he was a doctor as well as architect.'

(Pehoa Praśasti of the reign of Mahendrapala, v. 23, *Ep., Ind.*, Vol. I, p. 250, footnote 40.)

According to *Vitruvius* (Book I, chap. I, Transl., by Gwilt, pp. 3, 4) the architect 'should be a good writer, a skilful draughtsman, versed in geometry and optics, expert at figures, acquainted with history, informed on the principles of natural and moral philosophy, somewhat of a musician, not ignorant of the sciences both of law and physic, nor of the motions, laws and relations of each other of heavenly bodies.' But these do not include medicine.

ANAKOJA—Son of the brazier Mārāla, of A.D. 1395.

Mindoja of Patana made, together with his brother Kaloja, a pillar, (kambha) of bell-metal (weight specified) for a lamp.

(*Ep. Carnat.*, Vol. V, part I, Belur Taluq, no. 61, Transl., p. 61, Roman text, p. 135.)

Ā

ĀSALA—An architect (A.D. 1215, V. S. 1272) who constructed the step-well.

(Manglana Stone Inscrip., line 13, *Ind. Ant.*, Vol. XLI, pp. 11; 86, line 9.)

[1] This list does not include the mere Stone Masons or Engravers of Inscriptions, nor those architects who are mentioned in treatises like the Purāṇas, Epics, Kāvyas, etc., which are less historical than the Epigraphical records.

ĀHUKA—An architect who built the Śiva temple (A. D. 804).

(The first Praśasti of Baijnath, v. 35, *Ep. Ind.*, Vol. I, p. 107.)

I

IDAMORAKA (INDRAMAYŪRA)-ĀCHĀRYA—Sthapati or architect, the guru of the sculptor Ṇaṭaka (Nartaka) who made the image of the cobra on the slab on which the inscription is incised.

(Banawasi Prakrit Inscrip., line 2 f., *Ind. Ant.*, Vol. XIV, p. 334, notes 20, 23.)

IMDARĀKA—Sūtradhāra or the carpenter who assisted the chief architect Pāhiṇi, the builder of the Maṇḍapa, Akshasama, and Damā of the temple of Bhīmeśvara built with stones and bricks.

(The Chahamanas of Marwaṛ, no. XIII, Sāṇḍerāv Stone Inscrip. of Kelhanadeva, line 2 f., *Ep. Ind.*, Vol. XI, p. 48.)

O

OḌEYAPPA—An architect (A.D. 1386).

'This pillar (dīpamāle kambha) was made by Āchāri Ponna-pille's son Oḍeyappa.'

(*Ep. Carnat.*, Vol. IX, Devanhalli Taluq, no. 40, Transl., p. 78.)

K

KALLAYYA—An architect, son of Kalloja of Bānūr, by whom 'the work of the (bhoga-)maṇṭapa and the writing of this Śāsana were done.' (A.D. 1521.)

(*Ep. Carnat.*, Vol. VI, Kadur Taluq, no. 91, Transl., p. 16.)

KAMAU—The architect (śilpi), son of Visadru, who built 'the fifth octagonal pillar' on the face of which the inscription is recorded.

(*Sharqi Arch. of Jaunpur*, Inscrip., no. XXVII *Arch. Surv.*, New Imp. Series, Vol. I, p. 51.)

KĀMA-DEVA—Of Śilāpaṭṭa-vaṁśa (Śilāwaṭ caste, masons), an architect, appointed by a Muhammadan ruler Jallāla as one of the three architects to build a gomaṭha, a garden, and a step-well in the town of Baṭihaḍim.

(Batihagarh Stone Inscrip., v. 12, *Ep. Ind.*, Vol. XII, p. 46.)

KĀLI-DĀSI—A sculptor (A.D. 1140).

'For Pratāpa-Hosaḷa-Narasiṁha-Deva's sculptor Kedāroja, the sculptor Kālidāsi, champion over the proud, a thunderbolt to the rock (giri), titled (i.e., very eminent) sculptor, made the makaratoraṇa (or carved head-piece for the lintel).'

(*Ep. Carnat.*, Vol. v, part 1, Supplement, Belur Taluq, no. 239, Transl., p.275.)

See also reference under BALLAṆṆA.

KĀLAKOJA—Son of the brazier Mārāla-Mindoja of Pataṇa, made together with his brother Anakoja a pillar (kambha) of bell-metal (weight specified) for a lamp (A.D. 1395).

(*Ibid.*, Belur Taluq, no. 61, Transl., p. 59, Roman text, p. 135.)

KEÑCHA-MALLIVAṆṆA—The sculptor of the image no. 32, Belur temple (A.D. 1120).

(*Ibid.*, Belur Taluq, no. 47, Roman text, p. 125, Transl., p.55.)

KETĀNA—A sculptor (*see* under BALLAṆṆA.)

KEDAROJA—A sculptor (*see* under BALLAṆṆA).

KEDĀROJA—A sculptor of Hoysala Narasimha Deva (A.D. 1140).

(*Ibid.*, Supplement, Belur Taluq, no. 239, Transl., p. 275.)

KUMĀRAM-ĀCHĀRI—The sculptor of the image no. 12, Belur temple (A.D. 1120).

(*Ibid.*, Belur Taluq, no. 40, Roman text, p. 124, Transl., p. 55.)

G

GAṄGĀCHĀRI—An architect (A.D. 966).

'The work of this temple was done by Gaṅgāchāri.'

(*Ibid.*, Vol. IX, Magadi Taluq, no. 75, Roman text, p. 74, Transl., p. 60.)

GAṆṬEMADANA-BASAVANA—An architect (A.D. 1539).

'Those who did the work (Devāmbudhi tank): Gaṇṭemadana-Basavana made the pillars, Komāraiya the ornamental work, the stone-Veḍḍa Chenne-Royi built the stones of the embankment.'

(*Ibid.*, Vol. XII, Tumkur Taluq, no. 24, Transl., p. 8, para. 2.)

(ŚRĪ)GUNDAN—An architect, who built the temple of the (present) god Virūpāksha, originally of Lokeśvara, as mentioned in the inscription for Loka-mahādevī, the Queen-consort of the Western Chalukya king Vikramāditya, the second.

He is called 'Sūtradhārī' (one who supports the cause is the sūtradhāra or carpenter, and the sūtradhārī is the guru or priest of the carpenter). He is again called the Tribhuvanāchārya and also the Sarva-siddhi-Āchārya. He is stated to be the 'creator of many cities and houses; perfect and refined in conversation; houses, palaces, vehicles, seats, couches, his jewelled crown and crest-jewel.'

(Sanskrit and Old Canarese Inscrip., no. 99, also nos. 100, 101, and 115, *Int. Ant.*, Vol. x, pp. 164, 163, 165, 166, 170–171.)

CH

CHAṆḌI-ŚIVA—The architect of the Harsha temple, 'the famed son of Vīrabhadra, omniscient, like Viśvakarman, in the art (or science) of building houses (Vāstuvidyā) . . . He built this delightful house of Śaṁkara with its chapels (maṇḍapa), the beautiful porch (toraṇa) which contains all the gods, like a portion of heaven made by the Creator himself.'

'In his account of the ruins of this temple, Mr. Dean speaks of a doorway relieved by an architrave of the most elaborate sculpture, divided into twelve compartments, in each of which a group from the Hindu Pantheon occupies a place.'

(Harsha Stone Inscrip., vv. 43, 44. *Ep. Ind.*, Vol. II, pp. 123, 124, 128, note 72.)

Chahadadevapala son's grandson—Architect of the Qutb Minar.

(An historical memoir on Qutb, by J. A. Page, p. 43, Inscription no. 28.)

CHĀVANA—A son of Dāsoja, sculptor of the images, nos. 6, 11, 27, Belur temple (A.D. 1120).

(*Ep. Carnat.*, Vol. v, part 1, Belur Taluq, nos. 35, 39, 45, Roman text, pp. 124, 125, Transl., p. 55.)

CHIKA-HAMPA—The sculptor of the image no. 3, Belur temple (A.D. 1120).

(*Ibid.*, no. 33, Roman text, p. 123, Transl., p. 55.)

(SRĪ)-CHEṄGAMMA—A sculptor who 'made this image' (pratimā).

(Sanskrit and Old Canarese Inscrip., no. CIX, *Ind. Ant.*, Vol. X, p. 168, c. 1.)

CHOLAJANA—The sculptor of the image no. 17, Belur temple (A.D. 1120).

(*Ep. Carnat.*, Vol. V, part 1, Belur Taluq, no. 42, Roman text, p. 124, Transl., p. 55.)

CHOUGA—A sculptor (*see* under BALLAṆṆA).

CHAUDEVA—A sculptor (*see* under MALLITAMMA).

CHH

CHHICHCHHA—An architect who built the temple of Pramathanātha, is called the Vijñāna-viśva-karttṛi-dharmadhāra-Sutradhāra (A.D. 1116).

(Khajuraho Inscrip., no. IV, v. 60, *Ep. Ind.*, Vol. I, p. 146.)

J

JAKANĀCHĀRYA—The architect of the temple at Halibid and Somanathpura.

Cf. 'Jakanāchārya is the reputed architect of this magnificent building (Kait Iśvara temple), but he is also credited with having built all the temples, similar in style, throughout the district . . . A man of the same name is said to have built the temples at Madurā. Jakanāchārya was a prince who, having accidentally killed a Brāhmaṇ, employed twenty years of life, with the hope of washing away this great sin, in rebuilding temples between Kāśi and Rāmeśvara (Cape Comorin)—so says tradition.'

(*Ind. Ant.*, Vol. I, p. 44, c. 2, para. 2.)

JAṄGAMAYA—An architect (A.D. 1538).

'Chennema-Nāyaka-aya had the Yelayūr gate built with proper pillars by the hand of Muta-Nāyaka's disciple Jaṅgamaya.'

(*Ep. Carnat.*, Vol. XII, Kumgal Taluq, no. 20, Transl., p. 35.)

JĀHAḌA—The mason (Śilāvaṭa) who worked and shaped the stones for the step-well built by the architect Āsala (A.D. 1215).

(Manglana Stone Inscrip., lines 13–14, *Ind. Ant.*, Vol. XLI, pp. 88, 86, lines 9–10.)

ṬH

ṬHOḌHUKA—The son of Sammana, was one of the architects who fashioned the very lofty temple of Śiva with the chisel, as well as the Maṇḍapa (A.D. 804).

(The first Praśasti of Baijnath, vv. 36, 37, *Ep. Ind.*, Vol. I, pp. 107, 111.)

Ṇ

ṆAṬAKA (NARTAKA)—An architect and sculptor, who made the cobra (nāga) on the slab on which the inscription is incised, a pupil of Āchārya (Sthapati) Idamoraka (Indramayūra).

(Banawasi Prakrit Inscrip., line 2 f., *Ind. Ant.*, Vol. XIV, p. 334, notes 20, 23.)

ṆAṆṆAKA—A son of Kṛishṇa, most qualified architect of the temple of Śiva (Malava era 795, A.D. 738).

(Inscription from the Mahadeva temple, vv. 29, 30, 161, *Ind. Ant.*, Vol. XIII, pp. 165, 163.)

T

TUṚAVĀŚĀRI-KALIYUGA-MEYYAN—An architect (A.D. 1331).

'Another grant, by the same man, of lands (specified) to Tuṛavāśāri-Kaliyuga-meyyan, who built the temple.'

(*Ep. Carnat.*, Vol. IX, Hoskote Taluq, no. 96, Transl., p. 99.)

TH

THĀLŪ—An architect of the temple, an account of which is given in the Behal inscription of Singhana (A.D. 1222–23).

(*Ep. Ind.*, Vol. III, pp. 111, 113.)

D

DĀSOJA—Of Balligrāma, sculptor of the images nos. 5, 7, 9 of the Belur temple (A.D. 1120).

(*Ep. Carnat.*, Vol. V, part I, Belur Taluq, nos. 24, 36, 37, Roman text, p. 124, Transl., p. 55.)

DIVĀKARA—The master architect of the famous Vishṇu temple, *Angar Vat*, constructed by King Parama Vishṇuloka of Camboj.

DEMOJA—An architect who 'made the frame of the eastern door' of the structure referred to in the inscription (A.D. 1240).

(*Ibid.*, Supplement, Belur Taluq, no. 241, Transl., p. 275.)

DEVANĀGA—'Crest-jewel of sculptors, built the temple of Śiva.'

(Ratnapura Inscrip. of Prithvīdeva, v. 29, *Ep. Ind.*, Vol. I, pp. 49, 52.)

DEVĀDITYA—'The son of Āhlādana (who became) the firm (? professional, permanent, *sthira*) architect of the Vaidyeśa, is famous among the first rank of masons.'

(Inscrip. from Dabhoi, vv. 111, 112, *Ep. Ind.*, Vol. I, pp. 31, 24.)

DEVOJA—A sculptor (*see* under BALLAṆṆA).

DHARMA-VANANA—Architect of the Qutb Minar.

(An historical memoir on Qutb, by J. A. Page, p. 43, Inscription no. 29.)

N

NAÑJAYA—A sculptor (*see* under MALLITAMMA).

NANA-SALHA—Architect of the Qutb Minar.

(An historical memoir on Qutb, by J. A. Page, p. 43, Inscription no. 28.)

NARA-ŚOBHA—An architect (of A.D. seventh or eighth century).

Jambu-dvīpāntare kaśchit vāstu-prāsāda-tadgataḥ ।
Nara-śobha-samo vidvān na bhūto na bhavishyati ॥

'There has not been, and there shall not be, in Jambu-dvīpa (India) any wise man, proficient in (the art of) building houses and temples, equal to Nara-śobha.'

(Sanskrit and Old Canarese Inscrip., no. LXI, *Ind. Ant.*, Vol. IX, p. 74.)

NAṀDIKA—An architect.

Cf. 'Veyikā (Naṁ)dikena kataṁ—the rail (the gift of . . . Koṭi) was made by Naṁdika.

(Karle Cave Inscrip., no. 18, *Ep. Ind.*, Vol. VII, p. 64.)

NĀGĪ-DEVA—A sculptor.

Cf. 'This Śāsana of King Harihar was engraved by his orders by the carpenter Śāsanāchārya Nāgīdeva, the sculptor.'

(*Ep. Carnat.*, Vol. VIII, part I, Tīrthahalli Taluq, no. 201, Transl., p. 208, last para.)

NĀGOJA—of Gadugu, the sculptor of the image no. 37 of the Belur temple (A.D. 1120).

(*Ibid.*, Vol. V, part I, Belur Taluq, no. 51, Roman text, p. 125, Transl., p. 55.)

NĀYAKA—The high-minded son of Āsika, who is at the head of the masons, came from Suśarman's town, was one of the architects who 'fashioned the very lofty temple of Śiva, with the chisel, as well as the Maṇḍapa' (A.D. 804).

(The first Praśasti of Baijnath, vv. 36, 37 *Ep. Ind.*, Vol. I, pp. 107, 111.)

P

PAṬUMAN—Carpenter (Sūtradhāra), son of Vīsaihva, probably the builder of the gate where 'on a stone near the first niche on the south side' the inscription is found.

(*Sharqi Arch. of Jaunpur*, Inscrip. no. XIII, *Arch. Surv.*, New Imp. Series, Vol. I, p. 39.)

PADARI-MALLOJA—The sculptor of the image no. 21 of the Belur temple (A.D. 1120).

(*Ep. Carnat.*, Vol. V, part I, Belur Taluq, no. 43, Roman text, p. 125, Transl., p. 55.)

PADU-MAṆṆA—A sculptor (*see* under MALLITAMMA).

PADUMAYA—A sculptor (*see* under MALLITAMMA).

PADUMAVI—An architect (Sūtradhāra), son of Sai-Sutradhāra, who constructed the door, 'of the right jamb' on which the inscription is written (A.D. 1407).

(*Sharqi Arch. of Jaunpur*, Inscrip., no. XV, *Arch. Surv.*, New Imp. Series, Vol. I, p. 40.)

PĀKA—An architect.

'Hail! The house of the temple of (the god) Śrī-Vijayeśvara. Pāka (was) the fashioner of the ornamentation (alaṁkāra-nirmmāṇa-kāra) of these two pillars of Mātibhodamma.'

(Sanskrit and Old Canarese Inscrip., no. CXII, *Ind. Ant.*, Vol. X, p. 170, c. I.)

PĀHIṆI—Son of the Sūtradhāra Mahaḍūa and his wife Jasadevī, the architect who constructed the Maṇḍapa, Akshāsāma, and Ḍamā of the temple of Bhīmeśvara with stones and bricks.

He was assisted by the Sūtradhāra Mahidarā and Iṁdarāka.

(The Chahamanas of Marwar, no. XIII, Sāṇḍerav Stone Inscrip. of Kelhanadeva, line 2, *Ep. Ind.*, Vol. XI, p. 48.)

PĪTHE—'The architect who knows the rules of Viśvakarman (the architect of the gods, also means one who knows how to execute every kind of work), planned, designed and executed all the buildings, the temple of Śiva together with that cloister (maṭha) with wonderful floors (bhūmika), the hall of study (vyākhyāna-śālā), and laid out that long line of gardens in two rows (adjoining) Śambhu's temple' (A.D. 1155–56).

(Bheraghat Inscrip. of Alhanadevi, vv. 36, 27, 18, *Ep. Ind.*, Vol. II, pp. 13, 17, 9.)

PAISSAṆANARA-BĪRA—The sculptor of the image no. 16, of the Belur temple (A.D. 1120).

(*Ep. Carnat.*, Vol. v, part 1, Belur Taluq, no. 41, Roman text, p. 124, Transl., p. 35.)

B

BAMAYA—A sculptor (*see* under MALLITAMMA).

BALUGA—A sculptor (*see* under MALLITAMMA).

BALEYA—A sculptor (*see* under MALLITAMMA).

BALLAṆṆA—The inscription (Belur Taluq, no. 98, Roman text, p. 165, Transl., p. 71) informs us that a shrine of the goddess Nimbajā was set up in the temple in 1261. The sculptors who executed the marvellous statues and figures on the outer walls of this temple especially on the western side, have not given their names, except here and there, the following are the only ones :—Ballaṇṇa, Bochana, Chauga, Devoja, Harisha of Oḍeyagiri, Harisha of Tanagundur, Kālidāsi, Kedāroja, Ketāna, Mābalaki, Māchaṇṇa, Maṇibālaki, Masa, son of Kanimoja, and Revoja.

(*Ep. Carnat.*, Vol. v, part 1, Introduction, p. xxxviii.)

BIKKAHAPPĀ—The sculptor of the image no. 36, of the Belur temple (A.D. 1120).

(*Ibid.*, Belur Taluq, no. 50, Roman text, p. 125, Transl., p. 55.)

BĪRANAVA—The sculptor of the image no. 22, of the Belur temple (A.D. 1120).

(*Ibid.*, no. 44, Roman text, p. 125, Transl., p. 55.)

BOCHANA—A sculptor (*see* under BALLAṆṆA).

BH

BHŪTA-PĀLA—An architect.

Cf. This 'rock-mansion (selaghara), the most excellent one in Jambudvīpa, has been completed by the seṭṭhi Bhūtapāla from Vaijayanti.'

(Karle Cave Inscrip., no. 1, *Ep. Ind.*, Vol. VII, pp. 48, 49.)

BHOJŪKA—Of Śilāpaṭṭa-vaṁśa (Śilawaṭ caste, who are masons and found in the neighbourhood of Damoh), a Sutradhāra (carpenter) appointed by a Muhammadan ruler Jallāla as one of the three architects to build a Gomaṭha, a garden, and a step-well in the town of Baṭihaḍim.

(Batihagarh Stone Inscrip., v. 12, *Ep. Ind.*, Vol. XII, p. 46.)

M

MAṆI-BALAKI—A sculptor (*see* under BALLAṆṆA).

MADANA—'A scion of (the race of) Viśvakarman (? of the Brāhmaṇa caste, *vipra*), the builder of the wall of (glorious) Vaidyeśa, of the extensive temple, of the gates, of the wings, of the foundations.'

(Inscrip. from Dabhoi, vv. 111, 112, *Ep. Ind.*, Vol. I, pp. 31, 24.)

MANA—An architect, son of Vījala and grandson of Viśāla ; he is stated to have built, being assisted by his followers, the famous temple of Śiva together with many palatial buildings having prominent towers (A.D. 1428–29).

Aneka-prāsādaiḥ parivṛitamati prāṁśu-kalaśaṁ girīśa-prāsādaṁ vyarachayad anūnair anucharaiḥ ।

Manākhyo vikhyātaḥ sakala-guṇavān Vījala-sutaḥ sutaḥ śilpī jāto guṇa-gaṇa-yuto Viśala iti ॥

Vījalasya sutaḥ śilpī Manākhyaḥ sūtra-dhārakaḥ ।

(Chitragadh Inscrip. of Mokala of Mewad, second part, vv. 2, 3, *Ep. Ind.*, Vol. II, p. 421.)

MANYUKA—An architect who built the Śiva temple (A.D. 804).

(The first Praśasti of Baijnath, v. 35, *Ep. Ind.*, Vol. I, p. 107.)

MAYINA—The sculptor of the image no. 31, of the Belur temple (A.D. 1120).

(*Ep. Carnat.*, Vol. V, part 1, Belur Taluq, no. 46, Roman text, p. 125, Transl., p. 55.)

MALAYĀ—A sculptor (*see* under MALLITAMMA).

MALI—A sculptor (*see* under MALLITAMMA).

MALLI-TAMMA—An architect (A.D. 1196).

'A newly discovered inscription on a rock at Śrāvaṇa-Belgola, mentions a sculptor named Bidigoja, with the honorary prefix Śrīmart, somewhere about A.D. 900 (Mysore Archaeological Report, 1908-9, p. 15, para. 60); and two other records at the same place, of the date unspecified, mention Chandrāditya and Nāga-varma as having carved Jinas, animals, and other figures for the Jains' (*ibid.*, Report, 1912-3, p. 32).

'The earliest records of the Hoysala sculptors seem to be those on the Amṛiteśvara temple at Amṛitāpura, built in A.D. 1196. The 15 signatures comprise Mallitamma or Malitama, and Mali, each four times; and Padumaṇṇa, Baluga, Majaya, Subujaga, Padumaya and Muhaṇa, each once. The last named signs in Nāgāri character, an indication that he came from the north.'

'Report for 1913-1914, Plate II, contains illustrations of the work of seven sculptors: Masanitamma, Nañjaya, Chau-deya, Baleya, Lohita, Yalamasaya, and Bamaya, all from Somnāthpur.'

(V. A. Smith, Architecture and Sculpture in Mysore, *Ind. Ant.*, Vol. XLIV, p. 94, paras. 3, 4; p. 95, para. 1.)

MALLIYAṆA—The sculptor of the image no. 10, Belur temple (A.D. 1120).

(*Ep. Carnat.*, Vol. V, part 1, Belur Taluq, no. 38, Roman text, p. 124, Transl., p. 55.)

MALLOJA—An architect who built the central shrine (garbha-gṛiha) of the temple described in the inscription (A.D. 1167).

(*Ibid.*, Vol. VII, Shimoga Taluq, no. 55, Transl., p. 21, line 3.)

MASA—A sculptor (*see* under BALLAṆṆA).

MASADA—The sculptor of the image no. 33, of the Belur temple (A.D. 1120).

(*Ibid.*, Vol. V, part 1, Belur Taluq, no. 48, Roman text, p. 125, Transl., p. 55.)

MASANI-TAMMA—A sculptor (*see* under MALLITAMMA).

MAHÎ-DHARA—An architect, son of the chief of artisans (Sūtra-dhāra).

(Bheraghat Inscrip. of Alhanadevi, v. 37, *Ep. Ind.*, Vol. II, pp. 13, 17.)

MAHID(H)ARĀ—An architect (Sūtradhāra), who assisted Pāhiṇi, the chief architect of the Maṇḍapa, Akshasāma, and Ḍamā of the temple of Bhīmeśvara which was constructed with stones and bricks.

(The Chahamanas of Marwar, no. XIII, Sāṇḍerav Stone Inscrip. of Kelhanadeva, line 2, *Ep. Ind.*, Vol. XI, p. 48.)

MĀCHAṆṆA—A sculptor (*see* under BALLAṆṆA).

MĀCHOJA—A sculptor and architect (A.D. 1142).

'The sculptor Māchoja, the Āchārya of Kalukuṇi-nāḍ, the Viśvakarman of the Kali-yuga, built it' (Jinālaya).

(*Ep. Carnat.*, Vol. IV, Nāgamaṅgala Taluq, no. 95, Transl., p. 138, Roman text, p. 239.)

MĀBALAKI—A sculptor (*see* under BALLAṆṆA).

MĀMARIYAÑCHI-TAMMA—A son of the goldsmith Bandiyoja; 'he repaired and roofed a bīra-gal, which was made by Alibhanu-Āchāri (A.D. 1242).'

(*Ibid.*, Vol. III, Maṇḍya Taluq, no. 85, Transl., p. 48.)

MUDDOJA—A son of Tipaji, a stone mason, 'who built these (described in the inscription) temples (A.D. 1408).'

(*Ibid.*, Vol. X, Garibidnur Taluq, no. 59, Transl., p. 226, last para.)

MULAṆA—A sculptor (*see* under MALLITAMMA).

MODHAKIN—(also called Podhakin)—An architect, son of Vara (of the seventh or eighth century).

(Further Pabhosa Inscrip. no. 1, *Ep. Ind.*, Vol. II, pp. 480–481.)

Y

YAYYA—(otherwise called Jajja)—An architect.

(Further Pabhosa Inscrip. no. 1, *Ep. Ind.*, Vol. II, pp. 480–481.)

YALAMASAYA—A sculptor (*see* under MALLITAMMA).

R

RĀGHAVA—An artizan (sculptor), son of artizan (sculptor) Vīṁjhadeva, who carved the Verawal image (Valabhi Saṁvat, 927).

(Verawal Image Inscrip., line 5, *Ep. Ind.*, Vol. III, pp. 303, 304.)

RĀMA-DEVA—Śilpin (artist), son of Rūpa-kāra (sculptor), the engraver of the famous Dhar praśasti (panegyric) of Arjuna-varman.

(Dhara Praśasti of Arjuna-varman, v. 76 *Ep. Ind.*, Vol. VIII, pp. 117, 98.)

REVADI-OVAJJA—Of the Sarvasiddhi Āchāryas, versed in the secrets of Kanarese stone masons, probably the builder of the Papanatha temple.

(Inscription on Papanath Temple.)

REVOJA—A sculptor (*see* under BALLAṆṆA).

L

LAKSHMĪ-DHARA—An architect (A.D. 1104).

(Nagpur Stone Inscrip., v. 56, *Ep. Ind.*, Vol. II, pp. 188, 194.)

LASE—The sculptor of the image no. 35, of the Belur temple (A.D. 1120).

(*Ep. Carnat.*, Vol. V, part I, Belur Taluq, no. 49, Roman text, p. 125, Transl., p. 55.)

LOHITA—A sculptor (*see* under MALLITAMMA).

V

VĀMA-DEVA—'Famous for having built the temple of the Sun called Mula-sthāna.'

(Inscrip. from Dabhoi, vv. 111, 112, *Ep. Ind.*, Vol. I, pp. 31, 29.)

VIRAṆĀCHĀRYA(1)—A carpenter (*see* under STHAPATI) (A.D. 1558).

'This copper Śāsana was composed by Sabhāpati Svayambhu, and engraved by Viraṇa's son, the carpenter Viraṇāchārya.'

(*Ep. Carnat.*, Vol. IX, Channapatna Taluq, no. 186, Transl., p. 170, last para.)

(ŚRĪ) VĪRAṆĀCHĀRYA(2)—The architect (tvashṭā), who engraved the copper plate.

(Kṛishṇapuram Plates of Sadāśivarāya, v. 107, *Ep. Ind.*, Vol. IX, p. 339, *see* more details of this architect under Sthapati.)

VIŚVAKARMMĀCHĀRYA(1)—An artist and painter (A.D. 776).

'By the abode of all arts, skilled in painting pictures (sarvva-kalādhāra-bhūta-chitra-kalābhijñena), was this Śāsana written?'

(*Ep. Carnat.*, Vol. IV, Nāgamaṅgala Taluq, no. 86, Transl., p. 136, last para., Roman text, p. 235, last two lines.)

VIŚVAKARMMĀCHĀRYA(2)—A painter (A.D. 749).

'Skilled in all arts including painting (sarvva-kalāntarpāti-chitra-kalābhijñena) wrote the Śāsana.'

(*Ibid.*, Vol. VI, Mudgere Taluq, no. 36, last para., Transl., p. 67, Roman text, p. 153.)

VIŚVA-NĀTHA—An architect (A.D. 1530).

'Born in the family of Viśvakarma, the architect of the three worlds, Viśvanātha, the son of Basavāchāriya, who was the son of Voḍeyappayya, considered to be the Jagad-guru, engraved it.'

(*Ibid.*, Vol. V, part 1, Channarayapatna Taluq, no. 187, Transl., p. 207.)

Ś

ŚĀMU—'This must be the name of some writer on architecture.'

Śāmu-dṛishṭim anusṛitya nirmitā—'constructed (the lofty temple of Śiva, by two architects, Nāyaka and Ṭhoḍhuka) in accordance with the opinion of Śāmu' (A.D. 804).

(The first praśasti of Baijnath, v. 37, *Ep. Ind.*, Vol. I, pp. 111, 107, footnote 72.)

ŚIVA-PĀLA—A mason, one of whose ancestor is a Sūtradhāra (carpenter, named Deuka) but another of the same family is Sthapati (architect, named Nāga).

(From this it would appear that both Sūtradhāra and Sthapati belong to the same caste and that these are professional titles and not caste-names.)

Cf. Āsīchcha Nāga-sthapates tu Durggaḥ ।
Durggārkkato Deuka-sūtra-dhāraḥ ।
Asyāpi sūnuḥ Śiva-pāla-nāmā ।
Yenotkṛiteyaṁ suśubhā praśastiḥ ।

(Vasantgadh Inscrip. of Purnapala, v. 34, *Ep. Ind.*, Vol. IX, p. 15.)

ŚUBHA-DEVA—(A.D. 754)—Of Śāṇḍilya-gotra, sculptor or architect (rūpakāra), 'son's son of the sculptor Śiva-vardhamāna, son of the sculptor Śiva; or rather (bhūyaḥ) the Āchārya Jñāna-śiva, who is the disciple of the disciple's disciple at the feet of him, the venerable and worshipful Payo-bhakshin, who had the appellation of Śiva-śāsana, (and) who has come here (Paṭṭadakal, a village in the Bijāpur district, Bombay Presidency) from the Mṛigathaṇikā-hāra-vishaya on the north bank of the (river) Gangā—there has been set up in the (?) gateway (dvāra) of his own particular (? style of) shrine, this great stone pillar, which bears the mark of the seal of the trident,' and is octagonal at the upper part and square immediately below.

(Paṭṭadakal Inscrip. of Kirtivarman II, lines 15, 16, 17, *Ep. Ind.*, Vol. III, pp. 1, 3, 5, 7.)

(RĀṆAKA) ŚŪLA-PĀṆI—The crest-jewel of the guild of Vārendra artists (Vārendraka-śilpi-goshṭhī-chūḍā-maṇi), the son of Bṛihaspati, grandson of Manadāsa, and great-grandson of Dharma (end of the eleventh century).

(Deopara Inscrip. of Vijayasen, v. 36, *Ep. Ind.*, Vol. I, pp. 311, 315.)

S

SATYA-DEVA—A son of Pitāmaha, a merchant by birth, who was the Kārāpaka (persons appointed to look after the construction of the temple, Kielhorn, *Ind. Ant.*, Vol. XIX, p. 62, note 53), selected by the goshṭhi to see this work (the erection of the temple of the goddess Kshemāryā).

(Vasantagadh Inscrip. of Varmalata, vv. 9, 8, *Ep. Ind.*, Vol. IX, pp. 192, 189.)

SĀDEVA—An architect.

(Inscrip. from Dabhoi, vv. 111, 112, *Ep. Ind.*, Vol. I, pp. 31, 24.)

SĀMI(ṆA)—otherwise called Śyāmila, Svāmin-Vaḍhaki, (i.e., Vardhaki), carpenter or sculptor (Senart).

Sāminā . . . Vaḍhakinā . . . gharasa mugha kata—the opening (or door) was made by Sāmi, the Vardhakin.

(Karle Cave Inscrip. no. 6, *Ep. Ind.*, Vol. VII, p. 53.)

SĀMILA—also called Śyamila—A carpenter.

'Son of Veṇuvāsa, a carpenter, a native of Dheṇukākaṭa, made the doorway.'

(Karle Cave Inscrip. no. 6, *Arch. Surv.*, New Imp. Series, Vol. IV, p. 90.)

SĀMPULA—'The intelligent artisan,' engraver of the Ratnapura inscription of Pṛithvīdeva, the 'crest-jewel of sculptors,' built the temple of Śiva (A.D. 1189).

(Ratnapura Inscrip. of Prithvideva, vv. 28, 29, *Ep. Ind.*, Vol. I, pp. 49, 52.)

SIGGOJA—The sculptor, who made the sculpture mentioned in the inscription no. 525.

(*Ep. Carnat.*, Vol. VIII, part 1, Sorab Taluq, no. 525, Roman text, p. 168, Transl., p. 86.)

SIṄGAṆAHEBĀRUVA—The architect, who built 'the stone gateway of Śānti-grāma, ornamented with the tiger-face' (A.D. 1573).

(*Ibid.*, Vol. V, part 1, Hassan Taluq, no. 117, Transl., p. 34.)

SIṄGĀYA-BHAṬṬA—Rudraya's son, hydraulic engineer (jala-sūtrada), master of ten sciences (dasa-vidyā-chakravarttī), made (in A.D. 1388), at the order of the Governor Bukka-Rāya, a channel of ten miles from Kallūḍi to the Siravera tank. An interesting account of his accomplishments is given:

Jala-sūtra-svara-śāstre rasa-vaidye satya-bhāshāyām |
Rudraya-siṅgari bhavataḥ sadṛiśaḥ ko vā mahī-tale śūraḥ ||

'In the science of hydraulics, in divination or telling omens from sounds, in medical treatment with mercury (? perhaps alchemy), in speaking the truth,—Rudraya's (son) Siṅgari, what learned man is there in the world equal to you ?'

(*Ibid.*, Vol. X, Goribidnur Taluq, no. 6, Transl., p. 212, Roman text, p. 259, Preface, p. 2.)

SIṄGĀLI-KARGI—The son of Kali, a paṇḍita from the Nava-grāma-draṅga (watch-station near mountain passes, *cf.* Translation, Rāja-Taraṅginī, v. II, p. 291), the sthapati (architect of the tank specified).

(Shawar Museum Inscrip. of Vanhadaka, line 6, *Ep. Ind.*, Vol. X, p. 80.)

SUBUJAGA—A sculptor (*see* under MALLITAMMA).

SKANDA-SĀDHU—The son of Śrī-kaṇṭha, a descendant of a family of architects (sthapati-kula).

(Sholinghur Inscrip. of Parantaka I, line 21, *Ep. Ind.*, Vol. IV, pp. 224, 225.)

H

HARIDĀSA—An architect (Sūtradhāra), employed to repair the temple of Dakshiṇāditya (A.D. 1373).

(Gaya Inscrip. of Vikrama Samvat 1429, line 9, *Ind. Ant.*, Vol. XX, pp. 315, 313.

HARISHA(1)—(of Tāna Guṇḍur)—A sculptor (*see* under BALLAṆṆA).

HARISHA (2)—(of Oḍeyagiri)—A sculptor (*see* under BALLAṆṆA).

HAROJA—A sculptor (A.D. 1243).

'Haroja, son of Honnāchāryya, son of Boṭakāchāryya, the equal of Manu, Maya, and Viśvakarmma, beloved by all the people and farmers, set up an image of the sun.'

(*Ep. Carnat.*, Vol. IV, Nagamangala Taluq, no. 55, Transl., p. 127, Roman text, p. 219.)

HALĀ—Of Śilāpaṭṭa-vaṁśa (Silawaṭ caste, masons), an architect, appointed by a Muhammadan ruler Jallāla as one of the three architects to build a Gomaṭha, a garden, and a step-well in the town of Baṭihaḍim.

(Batihagarh Stone Inscrip., v. 12, *Ep. Ind.*, Vol. XII, p. 46.)

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[References to the quotations are given in full in all cases. No full list of works and authors is, therefore, appended. Certain series and a few authors more frequently referred to are mentioned below. The order is that of the English alphabet, as the names in the following list are all English.]

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Ancient Colonies in the Far East	By R. C. Mazumdar.
Ancient Khotan (Vols. I, II) ..	By Sir Aurel Stein.
Architectural Remains : Anuradhapur.	By Smitters.
Arch. Surv., New Imp. Series ..	*Archaeological Survey*, New Imperial Series.
Asiatic Researches (Vols. I—XIV).	
Bijdragen tot-de taal-land en *volken*-Kunde van Nederlandsche *Indie* (1918), of M. Finot, Kern, Vogel.	
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Buddhist Records	Translated by Bill.
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Abbreviated titles as referred to	*Authors and other particulars*
	reading, if any, among the editors has been noted by their names Cunningham, Senart, Bühler.)
C.I.I., F.G.I.	*Corpus Inscriptionum Indicarum*, 'Fleet's Gupta Inscriptions.'
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Ep. Ind.	*Epigraphia Indica.*

[1] The most arbitrary abbreviations of the names of the Taluqs, approximately 100 in the 12 volumes, have not been followed, first because it seems impossible, at least for me, to read, from his abbreviation, Cn., Channarayapattana (in the Introduction, and the table of contents, but indifferently spelt 'Channarayapatna' in the title at the top of each page), from Mj., Manjarabad, etc. (*see* Introduction, Vol. v, part I, p. 1); secondly, 100 such abbreviations will be too tedious for any patient reader to remember. These names have, therefore, been written hundreds of times in full.

Again there are as many as 12 kinds of paging sometimes in each part of each volume. Compare, for instance, Vol. III, 'Contents' after one folio of the fly-leaf, one of the names of the Taluqs, and one of a plate:

(1) Preface (page number is not given).
(2) List of illustrations (page number is not given).
(3) Introduction 1–36
(4) List of the Inscriptions classified in chronological order .. 1–IX
(5) Text of the Inscriptions in Roman characters .. 1–218
(6) Translations of the Inscriptions 1–117

Text of the Inscriptions:

(7) In Kannada characters 1–381
(8) in Grantha and Tamil characters 1–32
(9) in Arabic and Persian characters 1–4
(10) Addenda et Corrigenda 1–2
(11) Alphabetical list of towns and villages where the inscriptions were found 1–4
(12) Index to Introduction 1–11

Abbreviated titles as referred to	*Authors and other particulars*
Etudes Iraniennes, tom II ..	By Darmesteter.
Fa-hien's Travels	By Legge.
F.G.I.	Dr. Fleet's *Gupta Inscriptions*.
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Gloss. Grecian Arch.	*A Glossary of Terms used in Grecian, Roman, Italian and Gothic Architecture*, Anonymous, London, 1838.
Gwilt, *Encycl.* (generally followed by the cardinal number of articles and occasionally by page).	*An Encyclopaedia of Architecture*, by Joseph Gwilt, F.S.A., F.R.A.S., 1867.
H.S.I.I.	*South Indian Incriptions*, by Dr. Hultzsch.
History of Ancient Java (Vols. I, II)	By Lassen.
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This is not a solitary instance ; compare also Vol. v, part I, which bears nine kinds of paging exclusive of the fly-leaf, names of Taluqs, and a plate ; Vol. vii has ten kinds of paging.

There is yet another difficulty, perhaps the most irritating one, of consulting and referring to this extensive work comprising approximately 12,000 pages. Many of the readers for whose service this encyclopaedia is made are not expected to be familiar with the various South Indian scripts. It is for this reason, and also for sparing readers the trouble of confusing pagings, that I have referred to the Roman text only. But neither the Roman text nor the translation, even of the largest inscriptions covering sometimes 10 pages of 40 lines to a page (*cf.* Vol. v, part I, pp. 362, 364, 530, etc.), has been numbered by verses, lines, or paragraphs. Consequently, no one convenient method could be followed in referring to a particular passage in the Roman text and in the corresponding translation. I might have counted from the beginning of the inscription the lines in both the places (which I have actually done in referring to the smaller inscriptions), but that would not save trouble to readers, as they would themselves be required to count, say, 400 lines twice, once in the text and secondly in the translation. In such cases my references to a particular passage has been given thus : *Ep. Carnat.*, Vol. v, part I,—Channaraga-pattana Taluq no. . . . , Roman text or Translation, p. . . . , line . . . (of that particular page, and not from the beginning of the inscription), sometimes from the bottom upwards, stated distinctly in so many words (e.g. line 2 from bottom upwards, instead of saying line 43, i.e. from the top downwards) ; occasionally it appeared more convenient to say p. 43, para. 7, line 9, instead of counting all the lines from the top or bottom of the page.

Abbreviated titles as referred to	*Authors and other particulars*
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J.A.O.S. (followed by part, page, etc.).	*The Journal of the American Oriental Society.*

[1] In the earlier volumes of this series, pages are divided, not invariably however, into two columns, which are abbreviated thus : *Ind. Ant.*, Vol. v (preceded by the name of the article or the inscription), p. 320, C. 1 or 2 (=column 1st or 2nd), para. 1 or 2 (where there is more than one), line, say, 7 (of the para., when it is followed by any, or simply lines to be counted from the top ; in cases where it appeared more convenient, it is stated thus : line 7 from bottom upwards). In the earlier volumes the footnotes are not marked by the numerical figures, 1, 2, 3 and so forth ; they are indicated by some inconvenient signs, e.g. *, †, ‡, etc. It was not possible to refer to these notes by any particular name. Some of the inscriptions published in this series have been given three different titles in three places of reference, namely, one in the table of contents, a different one as the heading of the inscription in the body of the volume, and a third one on the top of the pages wherein it is described. Compare, for example, the following :

(1) 'Two Praśastis of Nānāka, a court poet of Viśāladeva of Gujarata' (*Ind. Ant.*, Vol. xi, contents, at the end of the volume).

(2) 'Sanskrit Grants and Inscriptions of Gujrat Kings, nos. iii and iv, Praśastis of Nānāka, a court poet of King Viśāladeva of Gujrat' (in the heading of the article, p. 98).

(3) Sanskrit Grants and Inscriptions (on the top of pages 99, 101, 103, 105, 107). I have generally referred to the last-named title, i.e. the one occurring on the top of the pages.

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OPINIONS AND REVIEWS

EXTRACTS

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(*History of Sanskrit Literature*, 1928, Preface, p. xx.)

E. B. Havell, Esq.—"Let me congratulate you on the results of your monumental researches by which you have contributed so much valuable data to the study of this great subject. All students of Indian Architecture are deeply indebted to you . . . . I have read enough to appreciate your very thorough treatment of the subject."

Dr. Abanindra Nath Tagore, D.LITT., C.I.E.—There are people who assume the role of critics of Art without having previously read a single treatise on Art. Moreover, they consider themselves to be authorities on the subject of Art although they may not have acquired the least practical skill in it.

There are enough of such people who talk a good deal on matters connected with Indian Art. They have continued to disseminate both within as well as outside India, a thoroughly inaccurate account of our Indian Art being influenced by their own individual notions.

There are others who are keenly anxious to acquire a true knowledge of Art and pursue their subject with a heart full of enthusiasm, by making a study of paintings, images, treatises on Art and the history of the land. Our young friend Professor Prasanna Kumar Acharya belongs to the latter category. The two big volumes which he has published after infinite pains are in the nature of an encyclopaedia embracing all the existing treatises on Indian Art. He has herein presented before us all the information that so long lay hidden and scattered all over the world.

There is a proverb 'What is not contained in the *Mahābhārata* is not to be found anywhere.' These two books may, on that analogy, be appropriately called the *Mahābhārata* of the literature on Indian Art, for, in them we find all that there is to know about Indian Art.

I may safely assert that these two volumes are just those that are fit to give a correct account of Indian Art to the world at large. Moreover, this much is certain that no two books of such magnitude and such merit as these, namely, *Indian Architecture* and *Dictionary of Hindu Architecture* have ever been published either in India or elsewhere on the subject of Indian Art, after such intensive study and infinite pains. As they are written in English it can be expected that a true knowledge of our Indian Art will now be conveyed to the four corners of the world.

Before one can acquire a thorough knowledge of Indian Art it is essential to make an acquaintance with the ancient books on the subject. Hitherto it has been extremely difficult to be able to read all the connected literature that is to be found in libraries whether in India or outside. Everyone of us does not know the language in which the treatises are written. Moreover, most of the original texts are preserved in distant lands. In the circumstances, a volume of this nature, written in English and containing as perfect a compendium as is possible, of all the existing treatises on Art, came to be a necessity, not only for us but for foreign artists as well. It really makes me feel proud that this stupendous task has been accomplished by our young friend, the author.

I cannot adequately express the extent to which I shall be able to make use of these two books and the profit which my pupils will derive from them. It is on all these grounds that I feel thankful to the author and wish an extensive circulation of his books.

We are expecting a few more such comprehensive volumes from the author on the subject of Indian Art written in the same beautiful style and including sketches of temples and other buildings, etc. in various parts. May the Goddess of Art be his guide in this great venture.

(Translated from *Pravasi*, April, 1928,
by B. N. Lahiri, Esq., M.A., I.P.)

Mahamahopadhyaya Pandit Ganganatha Jha, M.A., D.LITT., LL.D., **Vice-Chancellor, Allahabad University**.—These two books are the fruit of Dr. Acharya's labour extending over several years and the learned Doctor deserves congratulations on having completed and—what is more—seeing through the Press, this monument of his industry and scholarship. The ideal that he set before himself is neatly expressed by the sentence appearing as a motto on the opening page—'What the learned world demand of us in India is to be quite certain of our data, to place the monumental record before them exactly as it now exists, and to interpret it faithfully and literally.' The Doctor has acted up to this ideal. There are many of us who have collected and presented before the scholars important data, but very few of us have succeeded in retaining the balance of mind needed for interpreting the data 'faithfully and literally'; and Dr. Acharya appears to have been one of these few.

The *Dictionary* is a book which is so well done that it appears to be no exaggeration to say that for many decades, it cannot be improved upon, unless, of course, the South reveals to us more hidden treasures. If there is anything to object to, it is the title of the book, which does less than justice to it ; ' Encyclopædia ' would be a fitter title. The term ' Dictionary ' is associated in our minds with word-meanings ; while Dr. Acharya's work is very much more than word-meaning. Each term is followed by its meanings, mostly technical, an exhaustive account of the subject, and references to standard works of a wide range of literature. Thus, it will be seen, the work deserves a better title than ' Dictionary.' In fact, Dr. Acharya himself suggested to the London University the compiling of ' An Encyclopædia of Hindu Architecture,' and it appears to have been a mere freak of fortune that when the University decided to entrust the learned Doctor with the work of compiling, they chose the term ' Dictionary '; they appear to have been led to do this by the nature of the usual run of work done by modern scholars who in many cases have the unhappy knack of shirking work ; but in being led away by this prejudice, the University were unfair to their *alumnus*, who has, by this work, more than justified the title that he had himself suggested.

The *Dictionary* is based mainly upon the second work mentioned above. I have had occasion to deal with the *Mānasāra* myself on one or two occasions, and I know how hopelessly corrupt the available manuscripts of the work are ; and on more than one occasion, I have had to give up the task as hopeless. As Dr. Acharya remarks, it is a text which is written in five different scripts, possesses eleven badly preserved manuscripts, has undergone five recensions, and comprises more than 10,000 lines of a language rightly remarked by Dr. Bühler as the ' most barbarous Sanskrit.' To the ' barbarism ' of the Sanskrit of *Mānasāra*, I can bear personal testimony. I remember that when, about fifteen years ago, I was asked to make sense out of a few extracts from the work, I had to give up the task in disgust. Dr. Acharya deserves to be congratulated, therefore, for having succeeded not only in making some sort of sense out of the ' barbarous Sanskrit, ' but evolving out of it a readable text and thereby undertaking and completing a work that deserves to be accepted as a standard treatise on Ancient Indian Architecture and to be placed on the shelves of every decent library in the country.

The general reader will be specially thankful for the second smaller volume which supplies full information on the main principles of Hindu Architecture. It is complete in itself, and should be useful to all such students as may not have the time or the inclination to take up the more voluminous *Dictionary*.

It is a matter of special gratification to us of the Allahabad University that we have at the head of our Sanskrit Department a scholar capable of doing work which, as a monument of industry and patience, compares favourably with the best of that class of scholarly work which has hitherto been regarded as ' German.'

(*Indian Review*, March, 1928.)

Professor F. W. Thomas, C.I.E., M.A., PH.D.—" The immense labour which you have undergone and your devotion to a literature so obscure and difficult will receive their due recognition. I admire your courage and perseverance and your independence in working in a field where you could not expect much assistance from others (except in so far as the materials exist in published books). You are now certainly better acquainted with the subject of Indian architecture in the literary side than any other scholar, and no doubt you will often be consulted as an authority on the subject. I hope that the *Dictionary* will become a recognized work of reference as it deserves to do."

Sir Claude de la Fosse, C.I.E., M.A., D.LITT., **once D. P. I. and the first Vice-Chancellor of reconstructed Allahabad University.**—" The patience, the labour and the scholarship which you have devoted to these studies through so many years of your life are at length rewarded by the publication of works of permanent value to scholars and archæologists."

K. N. Dikshit, Esq., M.A. **Deputy Director General of Archaeology.**—" Your recent publication, the *Dictionary of Hindu Architecture*, is really a monumental work, the value of which can hardly be exaggerated. I have no doubt that indologists all over the world will acknowledge their indebtedness to you for placing in their hands such a comprehensive study of the elements of Hindu architecture."

Professor Dr. Sten Konow, Editor, 'Acta Orientalia,' Oslo, Norway.—" Many thanks for kindly sending me your two volumes. You are opening up a new branch of research, and the world of scholars will be thankful to you."

O. C. Gangoly, Esq., Editor, 'Rupam.'—" We have received your two books for review and I hasten to congratulate you on your remarkable and scholarly treatises which will remove one of the crying needs of the study of Indian Art."

Dr. Prasanna Kumar Acharya, who is Professor of Sanskrit at Allahabad University, has followed up his publication of the Sanskrit text and English translation of the *Mānasāra* by these two works on the same subject ; and students of Indian architecture should be grateful to him for accomplishing with such thoroughness a task which has been long overdue, and which must have entailed a tremendous amount of patient and often uninteresting work, in a number of different languages. The *Dictionary of Hindu Architecture* contains all the architectural terms used in the *Mānasāra* and in the known *Vāstu-śāstras*, published inscriptions, and other archaeological records, with full references and explanations and *Indian Architecture* is, for the most part, an introduction to the text of the *Mānasāra*.

The *Mānasāra* is universally recognized as the standard Hindu treatise on architecture, and is the most complete and probably the oldest one extant, though

no doubt it had many predecessors. This being so, it is rather surprising that no serious attempt has hitherto been made by modern scholars to edit and elucidate it. It has never before been translated into English, and most writers on Indian architecture disregard it or scarcely mention it. Eighty years ago indeed Ram Raz examined a portion of it in his excellent *Essay on the Architecture of the Hindus*; but it has never hitherto received comprehensive treatment. Scholars were no doubt shy of its technical terms or discouraged by its 'barbarous' Sanskrit, while it must be admitted that the Hindu tradition of presenting aesthetic principles as religious precepts and of embedding scientific matter in astrological formulas and mystic ritual is puzzling and disturbing to the non-Hindu. Nevertheless, the work deserves far more serious study than it has hitherto received, and not only from antiquaries, for Indian craftsmen of today still use the formulas of fifteen hundred years ago and the precepts of the *Śilpa-śāstras* are still the everpresent guides of the architect and the sculptor.

For the *Mānasāra* is, apart from its astrology, a practical craftman's handbook, none the less so because its directions are regarded as ritual rules and its classifications seem often arbitrary and fantastic. In it, as always in India, art is a practical affair, a means to a definite end, never unrelated to life and worship. *Mānasāra* means 'the essence of measurement'; and what would now be considered the practical part of the work consists of explicit directions regarding town-planning and the selection of sites, and more especially of minute statements of the mathematical proportions of every kind of building and image. This is not the place to examine the principles on which these proportions are worked out, nor are they always easy to follow without plans. The Essay of Ram Raz was illustrated, and it would have been a great help if Dr. Acharya could have rounded off his work with the addition of a series of well-executed plates. These would have been of especial value in examining what is perhaps the most interesting chapter of *Indian Architecture*, that in which the treatise of Vitruvius and the *Mānasāra* are compared. All that need be said here is that the two works, with all their essential differences, have so many striking affinities (in their classification, for instance, of the orders and mouldings) that we can hardly doubt that the standard Indian treatise was somehow or other influenced by the Roman architect who lived five hundred years or more earlier. Exactly how is another question, the solution of which would establish some important conclusions in architectural history.

(*The Times*' Literary Supplement, May 31, 1928.)

These two volumes are a valuable addition to the few English books dealing with the little understood principles of Indian architecture and achitectural terms as practised and used by the *salāṭs* who built the fine old shrines whose ruins remain to display their skill in construction and taste in details. Professor Acharya is to he congratulated upon the result of his labours in the very great amount of careful and painstaking search and the digging out of so much useful material from the vast amount of Indian literature he has consulted. The printers, however, have not turned out the books so well as the subject matter

deserves. The numerous and lengthy quotations in the *Dictionary* would have been better in smaller type ; and that of the *Mānasāra* is by no means clean. The paper is poor.

The author may not be averse to a few suggestions in the event of a second edition being produced. As ancient Hindu architecture, in its modes of construction, designs, and details, is more or less strange compared with anything a would-be student has been familiar with, it would be a very great help if the *Dictionary* were well illustrated with small vignette insertions, showing, for instance, the different types of pillars, mouldings, etc.

The *Mānasāra*, or " essence of measurement " probably written between A. D. 500 and 700, which is one of the *Śilpa-śāstras* dealing with architecture does not confine itself wholly to that art, but, like the others, busies itself with many other things, such as the planning of towns, villages, and forts, the orientation of buildings, the classification of kings and their ceremonial rites, the manufacture of couches, cars and chariots, ornaments, jewels, etc.

The title would have been better ' Hindu Architecture, ' since ' Indian ' as now used, includes Muhammadan. Measurements are laid down for every detail both in architecture and sculpture so it is not to be wondered at that we find such sameness, stiffness and oft-repeated conventional forms in the old temples which are still standing, especially in mediaeval work. The advance of Islam gradually influenced later work and brought into it much that is not Hindu. Of civil buildings very few now remain, and it is on the ancient temples, with a few tanks and wells, that the student has to depend for his practical acquaintance with Hindu architecture. The ' essence of measurement ' is brought out in all its scrupulous exactitude where every measurement in a building must be regulated upon one measure—that of the side of the shrine and nothing is left to the *salaṭ* to express his own individuality. And the measure of the side of the shrine depended upon the length of the blocks that could be obtained from the quarry, for the shaft of every pillar was always a single stone from the top of the base to the neck of the capital : it was never built, as a rule, of more than one stone.

Professor Acharya does not confine himself to a description and summary of the contents of the *Mānasāra*, but gives us references to architecture in the ancient epics, the *Purānas* and other works and a résumé of the contents of many other *Śilpa-śāstras*. He also ventures upon a long discussion about the similarity between the *Mānasāra* and Vitruvius, which he appears to think had some connexion the one with the other.

The index, which is practically a glossary, is good and full.

H. C.

(J. R. A. S., October, 1928.)

Dr. Acharya in this book (*Indian Architecture*) gives us a compact and interesting, though somewhat technical, treatise upon Indian Architecture in the literature of India. The standard work upon the subject is the *Mānasāra*, and a description of that work forms the kernel, so to speak, of Dr. Acharya's book.

The author begins with a general survey of the references to architecture in literature, dealing first with Vedic and Buddhist works, then with the *Purānas*, *Āgamas*, and other works. In his second section he summarizes the *Mānasāra* and gives shorter accounts in turn of the following works : the *Mayamata*, the *Amśumad-Bheda* of Kaśyapa, the *Viśvakārmiyaśilpa*, the *Agastya*, the *Samgraha*, and one or two others. Section III deals with the Position of the *Mānasāra* in Literature. Here, types of buildings are discussed, measurements, the five orders and the three styles.

In Section IV, Dr. Acharya discusses the possible relationship between the *Mānasāra* and the well-known treatise of Vitruvius. He deals at length with the similarities not only in contents and treatment, but also in style, between the two works, and declines 'to attribute all these affinities to mere chance.' This is a particularly interesting chapter.

Section V, *Age of the Mānasāra*, deals with various indications by which the date of the *Mānasāra* may be approximately fixed, and decides that it must have been written somewhere between A.D. 500 and 700. An appendix treats of certain features characteristic of the language of *Mānasāra*.

The book has an excellent index.

A work like this (*A Dictionary of Hindu Architecture*) which treats of 'Sanskrit architectural terms, with illustrative quotations from *Śilpa-śāstras*, general literature and archaeological records' will appeal probably to a comparatively small circle of students, but to them its value will be very great. Hitherto, there have been no dictionaries, even in Sanskrit, which have fully treated architectural terms, so that the present work, which has entailed enormous labour—the author tells us that he has gone through 50,000 pages of archaeological material—breaks entirely new ground. Dr. Acharya's work has been the greater since, for his purposes, the term, 'architecture' must include everthing built or constructed, from a royal palace to a sewer, or a garden to a bird's nest.

The work is based primarily on the *Mānasāra*, but its sources include all the architectural treatises of the *Vāstu-śāstras*, and those portions of the *Āgamas* and *Purānas*, etc., which deal with architecture. In addition, all the inscriptions published in such collections as *Epigraphia Indica*, the *Indian Antiquary*, and *Epigraphia Carnatica*, etc. have been taken into account.

Dr. Acharya has arranged his dictionary according to the Sanskrit alphabet. He gives, in English, a concise explanation of each term, followed by quotations sufficiently long to make clear the exact connotation of that term in its various uses. Not only are precise references given to passages in such works as the *Indian Antiquary*, when they have a bearing on the subject, but long and adequate quotations are given. The work is tremendously detailed : the entry *Stambha*, for example, occupying sixty pages. There are two appendices, the first of which gives a sketch of Sanskrit treatises on Architecture, and the second, a list of architects. Finally there is an index arranged according to the English meanings of the Sanskrit terms.

(*Asiatica*, June-July, 1929.)

A number of Sanskrit works have recently been published, and it had now become necessary to explain the expressions and terms to Europeans who have of late taken an interest in Hindu architecture. A number of European works have appeared but none has existed so far which elucidates these difficult terms. The work (*A Dictionary of Hindu Architecture*) is conscientiously carried out, as is shown by the fact that the author is not satisfied with merely giving the English terms, but quotes from the Sanskrit contexts in which the words occur.

As regards the second work—*Indian Architecture according to the Mānasāra-Śilpa-śāstra*—the author intended to issue it as an Introduction to his edition of the Sanskrit test and English translation which are in preparation. But in studying his subject he found the material increased considerably, and he has now produced a volume in crown 4to size of 268 pages. It is most gratifying that Indian scholars adopt the great care generally exhibited by European professors, and Mr. P. K. Acharya is one of them. The work is well divided ; it gives a general survey of architecture from the most ancient times onward ; it provides a summary of the various treatises on architecture, and finally subjects the *Mānasāra* to examination. Full references are also provided, and the index alone, beginning on page 215, is a most painstaking performance.

Both volumes will be welcomed by the increasing number of workers in and lovers of Indian art.

(*Asiatic Review*, April, 1928.)

The indigenous Indian literature on architecture has not received much attention so far. Ram Raz has published an *Essay on the Architecture of the Hindus* (London, 1834), which I am afraid, is very difficult of access, and some works were edited by Ganapati Sastri in Trivandrum Sanskrit Series. Besides that, we knew the portions dealing with architecture in the *Purānas*.

Now Prof. Acharya has been working on the subject for several years and has paid special attention to the principal work, the *Mānasāra*. In 1918, he graduated at Leyden with a thesis on this work whereafter he published in the *Allahabad University Journal*, a paper on its relation to Vitruvius. Now there comes a comprehensive treatise together with a Dictionary of the architectural terms and a survey of the literature, and an edition and translation of the *Mānasāra* are promised for a near future.

These works are to be greatly welcomed, making as they do, accessible for research a new province of Indian literature.

The author tries to prove that the *Mānasāra* in many respects is similar to the classical science of architecture as we know it from Vitruvius. Though his demonstration cannot yet be said to be definitive, yet he has succeeded to show so many coincidences that a connexion can hardly be doubted any longer. How this connexion has come about, the author has not tried to show, and perhaps, too, he has not thought it necessary. For, it is well known long since that classical architecture and fine arts have exercised a lasting influence on the development in North-West India. In that corner, Greeks and their half-breeds had

settled for centuries, and it seems that in an Indian inscription of the second century there is even mentioned an architect (Navakarmika) with a Greek name, viz. the 'dasa Agisala' of the relic casket of the Kaniska Stupa near Peshawar.

On the whole, it is only the edition that will enable us to form an opinion about these many questions raised by the author. But even now we are very much indebted to him, and particularly his *Dictionary* will be very welcome. It gives not only a copious list of technical terms of architecture more especially those to be found in the *Mānasāra*, but also circumstantial references to the literature as well as a survey of the indigenous Indian literature relative to the matter, which is for the greatest part only available in MSS.

Yet with pioneer work completeness must not be insisted upon, and what is being given to us we shall accept with sincere gratitude.

(*Deutche Literatunzeitung*, 1928 14 *Heft* 660—Extracts translated from the original German by Dr. Ludwig Alsdorf, PH.D.)

Dr. A. K. Coomaraswamy.—"These two volumes, the latter (*Dictionary*) especially, are monumental works, and will be indispensable to every student of Indian architecture and realia. Only those who work along these lines will realize the great labour involved in the preparation of such books, especially when they are almost the first of their kind ; the serious study of the Indian *Śilpa-śāstra* has been too long delayed, and a warm welcome may be extended to the Professor's undertaking. . . .

The following notes, however, are meant to be a further contribution to the subject and an acknowledgment of the value of what the Professor has already accomplished, rather than further criticism."

(*Journal of the American Oriental Society*, vol. 48, no. 3, pp. 250 fol.

This dictionary owes its name to the University of London. A glossary of the architectural terms used in the *Mānasāra*, the standard work on Hindu architecture, was prepared for the author's private use when he found it indispensable after struggling for two and a half years to edit for the first time and translate into English a text which is written in five different scripts, possesses eleven badly preserved manuscripts, has undergone five recensions and comprises more than 10,000 lines of a language rightly remarked by Dr. Bühler as the 'most barbarous Sanskrit.' In this connexion there arose an occasion for the author to express to the University the opinion that an Encyclopaedia of Hindu architecture was badly needed. Architectural expressions appear throughout the whole field of general Sanskrit literature and the epigraphical records, as well as in the extensive special branch of literature known as *Vāstu-śāstras*, more familiarly called *Śilpa-śāstras*. Existing dictionaries, in Sanskrit, English, or any other language, do not elucidate architectural expressions ; and the texts of the *Vāstu-śāstras* have been waiting for hundreds of years to be unearthed from manuscripts which are quite inaccessible without the guidance of a

special dictionary that would also be instrumental in bringing to light many new things hitherto left unexplained in inscriptions and general literature. The University selected the author as the person most immediately concerned and entrusted him with the task suggesting that he should 'make a full dictionary of all achitectural terms used in the *Mānasāra* with explanations in English, and illustrative quotations from cognate literature where available for the purpose.' Thus the terms included in this dictionary are primarily those found in the *Mānasāra*. But all the new architectural terms of any importance discovered in all the known architectural treatises, epigraphical documents, and general literature have also been added. To form even a faint idea of the herculean labour involved in bringing out this colossal work a perusal of the preface is necessary. This the first volume published embraces 882 pages, one more volume *Indian Architecture according to Mānasāra Śilpa-śāstras* has been published and two other volumes to complete the dictionary are in the Press. This dictionary is a veritable Encyclopaedia of Hindu architecture. It deals with some 3,000 terms, relating to architecture, sculpture and cognate arts, and covers a vast number of topics. Under each term is brought together useful information in the form of a short article, illustrated, with quotations from *Śilpa-śāstras*, general literature and archaeological records. It is a pioneer work. It is hoped that it may be instrumental in explaining many things hitherto left obscure in inscriptions and general literature. Two appendices enhance the utility of the work : in one appendix is given a sketch of the literature on the subject, while the other contains histories of ancient Indian architects, together with a short description of their works. Great has been the labour of the erudite author and he is to be congratulated on its successful issue, so also the publishers for the volume as regards its printing and general get-up is all that can be desired.

It (*Indian Architecture*) is a handbook of Indian architecture, sculpture and cognate arts. The author, Dr. Prasanna Kumar Acharya, I.E.S., is an Indian Sanskrit scholar who has been trained in Europe in scientific methods of criticism and who has given the substance of a number of printed works and manuscripts, belonging to libraries in India and Europe which have been visited by him. The book gives an account of the architecture of the Vedic, the Buddhist and the classical periods of India up to the Muhammadan age. An interesting feature is the comparison drawn between the Indian standard work *Mānasāra* and the European standard work of the Roman architect, Vitruvius. Striking similarities are shown to exist between Greco-Roman and Indian architecture.

(*Indian Engineering*, January 21 and 28, 1928.)

Dr. Kalidas Nag, M.A., D.LITT.—While Hindu Painting and Decorative art were hovering between hope and despair as to the chance of gaining *occidental* recognition (the only recognition that carried weight !) Hindu architecture attracted the notice of all experts by its undeniable grandeur and originality. Ever since the publication of the *Essay on the Architecture of the Hindus* by Ram Raz, published in London (1834), there was a steady increase in the appreciation of

the Hindu style and of the stone epics of India. The monumental studies of Rajendralal Mitra on Orissan architecture, followed by the work of Manomohan Ganguli, have demonstrated that the interest in the subject was growing. The enormous documentation of Cunningham, Burgess, and others of the Archaeological survey challenged the attention of artists and archaeologists all over the world. But the indigenous tradition of India with regard to the science and art of Architecture did not receive the serious examination long overdue, before Dr. Acharya came forward to devote years of his academic studies to the elucidation of the problems of the Hindu *Śilpa-śāstras*. Accidentally coming across a copy of *Mānasāra* he plunged deeper and deeper into the intricacies of Hindu constructional science : the more baffling were the problems of the texts preserved in the ' most barbarous Sanskrit,' the more intense became his zeal which ultimately led to the development of this splendid *Dictionary*—the first of its kind—of Hindu architecture. Thanks to the comprehensiveness of Hindu masters of the science, Architecture in the work has been treated in its broadcast sense, implying practically everything that is constructed,—from buildings religious and secular to town-planning, laying out of gardens, making of roads, bridges, tanks, drains, moats, etc., as well as the furniture and conveyances. Thus the *Dictionary* of Dr. Acharya gives us for the first time in a handy volume a rich vocabulary hitherto unknown or only vaguely known. Dr. Acharya has earned the permanent gratitude of all Indologists by collating and collecting not only manuscripts (largely unpublished) but also the epigraphic data scattered in the bewildering documents of Indian inscriptions which have given a sureness of touch and a precision of connotation that are admirable. Dr. Acharya has spared no pains to put the meaning of the terms as much beyond doubt as possible, for he has placed the terms invariably in their organic context by quoting *in extenso* from the generally inaccessible texts. Thus the *Dictionary* will not only react in a wholesome way on our accepted notions of Hindu art and archaeology but also on the future compilation of a comparative lexicon of the Hindu technical terms—our future *Paribhāshendu-śekhara*.

As a pioneer work, it will hold its place high amongst the recent publications of Indology. As a pioneer work again the author, let us hope, will take constant note of friendly suggestions with a view to enhance the scientific value of this lexicon. While comparisons with European treatises on Architecture (e.g. Vitruvius) are interesting it is more useful to make each term shine indubitably out of a comprehensive juxtaposition of pertinent texts found, published or noticed anywhere in India, with a special eye on *local* peculiarities and their correlation with *regional* style. Rich materials are still lying idle in the latest publications of the Trivandrum Sanskrit Series (e.g. *Mañjuśrī-mūla-kalpa* or *Tantra*, translated into Tibetan) and in the Gaekwad Sanskrit Series (e.g. *Samarangana-Sūtradhara* and *Mānasollāsa*, etc.). So Laufer's Monograph on *Chitralakshaṇa* seems not to have been utilized. But the more serious omission is perceptible in another field which has furnished some of the noblest specimen of Indian architecture. I mean the field of Greater India where we meet even today *Borobudur* proclaiming

the titantic architechtonic genius of the Sailendra sovereign of Srivijaya (Sumatra, Java) and *Angkor Vat*, the soaring Vimāna of Vishṇu constructed by King Paramavishṇuloka of Camboj and designed by the master Architect Divākara. Let us hope that in his next edition Dr. Acharya will enrich his lexicon by incorporating the data imbedded in the epigraphic and monumental documents of Greater India.

Two appendices containing enumerations of the important Sanskrit treatises on Architecture and of historical architects, enhance the value of the book. May we request the learned lexicographer to add a special appendix of the technical terms and names scattered in the various living vernaculars of India where we find, as in Orissa (*cf.* Nirmal Bose : *Konarak*), native architects still constructing according to their *vernacular Vāstu-śāstras* or even conserving a rich tradition in *bhasā* vocabulary (oral or textual).

This volume (*Indian Architecture*) incorporates the general problems, historical as well as textual, that form the introduction to Dr. Acharya's *Dictionary*. In the first 30 pages the author gives a tantalising survey of the popularity of Architecture evinced by the Vedic, the Buddhist and the classical literature. We hope that the author will make the treatment more exhaustive. The next hundred pages are devoted to a very useful summarizing of the contents of the outstanding *Śilpaśāstras*, e.g. *Mānasāra*, *Mayamata*, and such manuals ascribed to Viśvakarmā, Agastya, Kāśyapa, Mandana and others. The comparison instituted between *Mānasāra* and Vitruvius may or may not lead to a discovery of the order of that of a *Romaka Siddhānta* and *Hora-śāstra*, yet the similarities are striking. But the most important sections are the author's discussions, relating to the three styles or orders of architecture—Nāgara, Vesara and Drāvida—representing the three geographical divisions of India. We recommend the books of Dr. Acharya to all Indologists and expect eagerly the publication of the two supplementary volumes now in Press.

(The *Modern Review*, February, 1928.)

(London Correspondent)

The two books recently written under instructions from the Government of India on Hindu architecture and published by the Oxford University Press, ought to be valuable not only to the student of architecture, but also to the student of peoples of the world, for architecture expresses almost more than anything else the ideals and ideas a people hold at any given time. For the scholar these two books should be invaluable, as they help to elucidate in architectural terms details of the distant past, that have hitherto been clothed in mystery. The texts of the *Vāstu-śāstra* have, as the author states in his preface, been waiting for hundreds of years to be unearthed from manuscripts, which are quite inaccessible without the guidance of a special dictionary. This is the task to which the author set himself, and those who are competent to express an opinion agree that he has amply fulfilled his mission and has brought to light many new things hitherto unexplained in inscriptions and general literature.

The second book is a handbook of Indian architecture and deals with the Vedic, Buddhist and classical periods up to the Muhammadan times.

Today there is in Great Britain an ever-increasing number of people to whom such books appeal, probably because of the work of the India Society and kindred bodies who have stimulated thought in this direction by persistent effort. It is, therefore, likely that the present books will find a considerable reading public here as well as in the East.

(The *Leader*, February 24, 1928.)

Dr. Beni Prasad, M.A., PH.D., D.SC.—Dr. P. K. Acharya attempts to offer the results of his twelve years' study of Hindu architecture in four volumes, two of which have just been published while the other two may soon be expected to see the light. They are based on *Mānasāra*, the standard authority, on a number of minor works and a host of chapters or references, legal, religious, and general literature, as well as inscriptions. The *Dictionary*, in particular, a pioneer work, is a monument of diligent research and systematic arrangement. In words quoted in the preface, 'no one but those who have taken part in similar labours, can at all realize the amount of tedious toil, I might almost say drudgery, involved in doing everything single-handed, collecting the quotations and verifying references and meanings, making indices and lists of words, sorting and sifting an ever-increasing store of materials, revising old work, arranging and re-arranging new, correcting and re-correcting, writing and re-writing, and interlineating copy, till reams upon reams of paper have been filled, putting the eyesight, patience and temper to a severe trial.' The series is addressed to scholars and advanced students but all interested in the scientific study of Hindu culture or in that of fine arts in general will find it instructive.

The Hindu *Śilpa-śāstra* or *Vāstu-śāstra* is a comprehensive but by no means unsystematic study. It deals with all kinds of buildings, town-planning, gardens, and market-places, ports and harbours, roads, bridges, gateways, etc., wells, tanks, trenches, drains, sewers, moats, walls, embankments, dams, railings, etc., furniture like bedsteads, couches, tables, chairs, baskets, cages, nests, mills, conveyances, lamps, etc., and even dresses and ornaments such as chains, crowns, headgear and foot- and arm-wear. The dominant topic, however, is architecture—the plan and erection of religious, residential and military edifices and their auxiliary members and component mouldings. The science which like the *Dharma-śāstra*, *Artha-śāstra* and *Kāma-śāstra*, professes to derive its first origins from Brahmā himself, developed in the course of centuries and reached its culmination about the sixth century A.D. in the great treatise called *Mānasāra* probably after the name of its author.

Here as elsewhere in the domain of Hindu history it is difficult to determine how far the theoretical descriptions in literature correspond with the practical realities of life. A close comparison of architectural precepts with the details of

archaeological finds and the narratives of foreign visitors like Yuan Chaung (seventh century A.D.) suggests that the former, while not literally true to facts, are largely based on practice. It is interesting to infer that in ancient India in spite of all the other worldliness of philosophers and spiritualists, those who could afford maintained a high standard of living. Thus from a passage in the Buddhist work *Chullavagga*, VI, 4, 10, we learn that houses comprised dwelling-rooms, retiring-rooms, store-rooms, service-halls, halls with fire-places, closets and cloisters, halls for exercise, wells and ponds, sheds for wells and open-roofed sheds, bath-rooms and halls attached to them. Of hot-air baths the following description was given by the late T.W. Rhys Davids on the basis of the Vinaya Texts III, 105–110, 297. 'They were built on an elevated basement faced with brick or stone with stone stairs leading up to it, and a railing round the verandah. The roof and walls were of wood, covered first with skins and then with plaster, the lower part only of the wall being faced with bricks. There was an ante-chamber and a hot-room and a pool to bathe in. Seats were arranged round a fire-place in the middle of the hot-room and to induce perspiration hot water was poured from the leathers.' Again, as we learn from the *Dīgha Nikāya*, there were open air bathing tanks, with flights of steps leading to the water, faced entirely with stone and ornamented with flowers and carvings. It is needless here to enter into the details of domestic furniture but it is interesting to note, *inter alia*, that benches were made long enough to accommodate three persons, that couches were covered with canopies, and that there were several types of Asandis, such as sofas, armed chairs and cushioned chairs.

The plan of a village, outlined in the ninth chapter of *Mānasāra*, is theoretical for its details do not tally with any of the realistic descriptions by Greek, Chinese or Arab visitors. None the less, it is instructive. A village, we are told, should be surrounded by a wall or stone pierced by four main gates which should be connected by roads. The villages should thus be divided say into four principal blocks. A highway should also run round the village and public buildings be located on it. The whole inhabited area should be well-supplied by ponds and tanks. Caste which influenced all life and thought in ancient India did not leave town-planning untouched. It is proposed that the best quarters should be reserved for the Brahmans and that the Chandālas should live outside the limits of the village.

In the interests of sanitation and decency it is laid down that the temples of fearful deities and places for cremation should be situated outside the walls. Everywhere drains should follow the slope. The tenth chapter of *Mānasāra* sketches, plans for towns on similar lines, making special mention of parks, common shops, exchanges, temples, guest-houses, colleges, etc. and giving elaborate direction for their construction. It is impossible even barely to touch the fringe of the vast subject in the course of a short review. Those interested in this highly important aspect of ancient Indian culture will do well to consult Dr. Acharya's detailed, well-documented and scholarly productions.

(The *Leader*, December 4, 1927.)

Notable publications by the United Provinces Government

All students of Indian Art in England, and a good many in India, should be grateful to the U. P. Government for these excellent books. They contain the fruits of the labour of an Indian Educational Service officer, who has spent about 12 years on these works which, to say the least, are stupendous.

Except for an essay on the Architecture of the Hindus by Ram Raz published in 1834, no attempt till now was made to present the Ancient Indian Architecture in a scientific, clear, and methodic way. To Professor Acharya, therefore, goes the credit of exploring this field of knowledge like a pioneer worker, and of bringing to light a branch of ancient Indian culture which contains interesting, even rather fascinating, materials.

A Wise Term

Śilpa-śāstra or *Vāstu-śāstra*, which is conveyed by the term 'architecture,' is much wider than the English term. 'It denotes all sorts of buildings, religious, residential, and military, and their auxiliary members and component mouldings. Secondly, it implies town-planning; laying out gardens; constructing market-places; making roads, bridges, gates; digging wells, tanks, trenches, drains, sewers, moats; building enclosure-walls, embankments, dams, railings, ghats, flights of steps for hills, ladders, etc. Thirdly, it denotes articles of house-furniture, such as bedsteads, couches, tables, chairs, thrones, fans, wardrobes, clocks, baskets, conveyances, cages, nests, mills, etc. Architecture also implies sculpture and deals with the making of phalli, idols of deities, statues of sages, images of animals and birds. It includes the making of garments and ornaments, etc.'

Professor Acharya has divided his *Indian Architecture* into five parts which give us a very clear idea of the subject, its authorities and all that is generally required for a quick apprehension of the subject.

General Survey

In Part I Professor Acharya gives a general survey of the whole range of ancient Indian literature and bears out 'that the authors of the Vedic literature were not ignorant of stone-forts, walled cities, stone-houses, carved stones, and brick edifices.' The relics of Mahenjo-daro and Harappa unearthed by the Archaeological Department under the able guidance of Sir John Marshall give the same evidence of a time much earlier than the earliest Veda. The Buddhist and Jain literature is replete with reference to buildings, furniture and sculpture of a very high order, The classical Sanskrit literature bears the testimony of a very well-developed art in all these respects; several *Purānas* have an elaborate description of Śilpa and some of the *Āgamas* whose main objects is 'to inculcate the mystical worship of Śiva and Śakti' devote considerable attention to architecture.

The Mānasāra

In Part II he gives a very detailed summary of the *Mānasāra* which is his main study as also brief accounts of several other works of well-known authorities but which lie buried still in manuscript form. The *Mānasāra* contains seventy chapters, 'the first eight are introductory, the next forty-two deal with architectural matter, and the last twenty are devoted to sculpture.'

Here we have what claims to have taken the whole manifestation of architectural art as its subject. It is up to the present moment, perhaps the most ambitious effort of the kind, and the author has spared no pains to make his work as complete and as illustrative as possible.

Part III described the position of *Mānasāra* in Hindu literature and gives certain interesting facts. The styles are fully described and discussed. We are told that, according to *Mānasāra* there are three of them, Nagara, Vasara and Drāvida, and that they apply both to architecture and sculpture.

Comparison

Part IV compares *Mānasāra* with the well-known treatise of Vitruvius on architecture which belongs to the first century before Christ. Professor Acharya has been trained in scientific methods of criticism in Europe and in this part of the work we find a considerable scope for this training. The comparison is thoughtful, reasoned and balanced. The conclusions are cautious and well-supported. The author has clearly shown ' that there are undeniable similarities between the two standard works and that their affinities do not seem to be accidental.' He has wisely left the question of the debt of one author to the other or of both to some common source, quite open. In the present resources of our knowledge it is impossible to arrive at a more definite conclusion.

In Part V he collaborates in a scholarly way both the internal and external evidence for arriving at correct age of *Mānasāra*. Here we have ample evidence of Professor Acharya's unrivalled grasp of the subject, his critical acumen and of his indefatigable industry and enthusiasm in having ransacked the whole of the ancient Indian literature covering thousands of pages in print and in manuscript. ' The evidence submitted above would warrant the extent of the period of the *Mānasāra* from A.D. 500 to 700 '—by no means an unwarranted conclusion.

Defective Language

It is regrettable that the language in which this important work has been found is very defective and faulty and has been termed ' barbarous Sanskrit ' by authorities like Dr. Bühler and Dr. Sir Ram Krishna Bhandarkar. It is all the more creditable for Professor Acharya to have taken pains and construed the text correctly. In the appendix the learned author has given us some idea of the defective language by collecting together the irregularities.

Professor Acharya's *Dictionary of Hindu Architecture* is a monumental work, the first of its kind. It deals with three thousand words relating to architecture and sculpture and cognate arts. Under each term is brought together all the necessary informations in the form of a short article illustrated with copious quotations from the ancient printed books as well manuscripts, the general literature and the archaeological records. And this has been done with a thoroughness and accuracy which are the author's own. Full quotations for bringing out each and every shade of the meaning of a word are given, in effect the *Dictionary* becomes more of an Encyclopaedia rather than a Dictionary. The learned author has laid the scholars and the general public under the deep debt of obligation by removing a long-felt want.

(The *Pioneer*, February 13, 1928.)

HINDU ARCHITECTURE

(London correspondent)

Dr. Prasanna Kumar Acharya, I.E.S., Professor of Sanskrit in the University of Allahabad, is now recognized as one of the leading Indian authorities on his special subject, particularly in its relation to ancient architecture. He has recently written, under instructions from the Government of the United Provinces, two books that should be of considerable value to students, namely *A Dictionary of Hindu Architecture* and *Indian Architecture according to Mānasāra Śilpa-śāstra*—both published by the Oxford University Press. The U. P. Government have borne the expenses of both publications, which will be regarded by scholars as a contribution of permanent importance in the elucidation of the subjects discussed.

This is not the place in which to give a lengthy review of these two volumes the first of which runs to 861 pages. This book is a monument of erudition and patient industry. A man who can produce works of this order must be wholly immersed in his subjects. Existing dictionaries, in Sanskrit, English, or any other language, do not elucidate the architectural terms of a long distant past, and without such a survey as Dr. Acharya has undertaken there could be no proper appreciation of the ancient genius. The texts of the *Vāstu-śāstra* have, as the author stated in his preface, been waiting for hundreds of years to be unearthed from manuscripts which are quite inaccessible without the guidance of a special dictionary. This is the task to which the author has addressed himself, and those who are competent to express an opinion will agree that he has brought to light new things hitherto left unexplained in inscriptions and general literature.

The other work which is somewhat less voluminous, is a Handbook of Indian Architecture, Sculpture and cognate Arts. It gives an account of the architecture of the Vedic, the Buddhist, and the classical periods of India up to the Muhammadan age. Such a work should be of great interest to those in this country, as well as in the East whose attention has been drawn to these subjects by the publication of the India Society and kindred bodies. There is quite a large constituency nowadays to which works of this character, dealing with the ancient arts of India, afford a real attraction. An interesting feature of Dr. Acharya's present study is the comparison which he draws between the Indian standard work, *Mānasāra*, and the European standard work of the Roman architect, Vitruvius. The book might have made a more popular appeal if the text had been interspersed with a few illustrative re-constructions in plans or drawings, of the architectural features described. This, however, was not the purpose of the author. Rather it was to provide a fount of information from which future seekers may gain knowledge of an art which can never entirely lose its place in human records. What the learned world demands from India is certainty of data in these matters, and this has been undoubtedly supplied by Dr. Acharya's researches. In these volumes, and in others that are still in the press, he has illumined a comparatively unknown branch of Sanskrit study, and the fruit of his long and arduous labours will assuredly be of abiding value to scholars everywhere.

(The *Hindu*, Madras, February 23, 1928;
The *Tribune*, Lahore, February, 28, 1928;
The *Hindustan Review*, April, 1928.)

Extract from the *Annual Bibliography of Indian Archaeology*, 1928, p. 61.

150. *[Dr. Prasanna Kumar ACHARYA:—*A Dictionary of Hindu Architecture.* Oxford University Press: 1927.] See *An. Bibl. I.A.*, 1927, no. 124.

Reviewed : *Rūpam*, nos. 35—36, July-Oct. 1928, pp. 39—44, by Akhay Kumar MAITRA. *FRAS*, 1928, pp. 943f., by H. C. : " . . . a valuable addition . . . careful and painstaking search . . . The printers, however, have not turned out the books so well as the subject matter deserves."

The *Asiatic Review*, 1928, p. 349: "The work is conscientiously carried out . . . " *Ind. Art. & L.*, vol. II, pp. 96f., by E. B. HAVELL : " . . . a monument of patient research which will be of invaluable help for the student."

Dtsche Lit. Ztg., 1928, columns 659—661, by Sten KONOW : "Bei Pionier-Arbeiten draff man . . . auf Vollstindigkeit nicht Anspruch machen, und was uns gegeben wird, werden wir mit aufrichtiger Dankbarkeit entegennehmen."

RAA, 1928, pp. 56f., by Jean BUHOT : " . . . ouvrage teis digne d'eloges : en mame temps il n'est pas douteux qu'une edition ulterieure ne l'amdilore."

Asiatica, vol. I, pp. 225f.

The *Pioneer*, Allahabad, 13th Febr. 1928. Cp. below COOMARASWAMY, no. 162.

151. *[Dr. P.K. ACHARYA, I.E.S., M.A., D. LITT.:—*Indian Architecture according to Mānasāra-Śilpa-śāstra.* Oxford University Press : 1927.] See *An. Bibl. I. A.*, 1927, no. 125.

Reviewed : *Rūpam*, nos. 35—36, July-Oct. 1928, pp. 33—44, by Akhay Kumar MAITRA. The reviewer offers some criticisms while acknowledging the great merits of the work. *FRAS*, 1928, pp. 943—945, by H. C. : " . . . a valuable addition . . . . "

The *Asiatic Review*, 1928, p. 349: "It is most gratifying that Indian scholars adopt the great care generally exhibited by European professors, and Mr. P. K. ACHARYA is one of them."

Ind. Art. and L., N. S., vol. II, pp. 96f., by E. B. HAVELL : . . . a safe foundation for future historians of Indian architecture."

RAA, 1928, p. 57, by Jean BUHOT : " . . . ouvrage tres consciencieux."

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